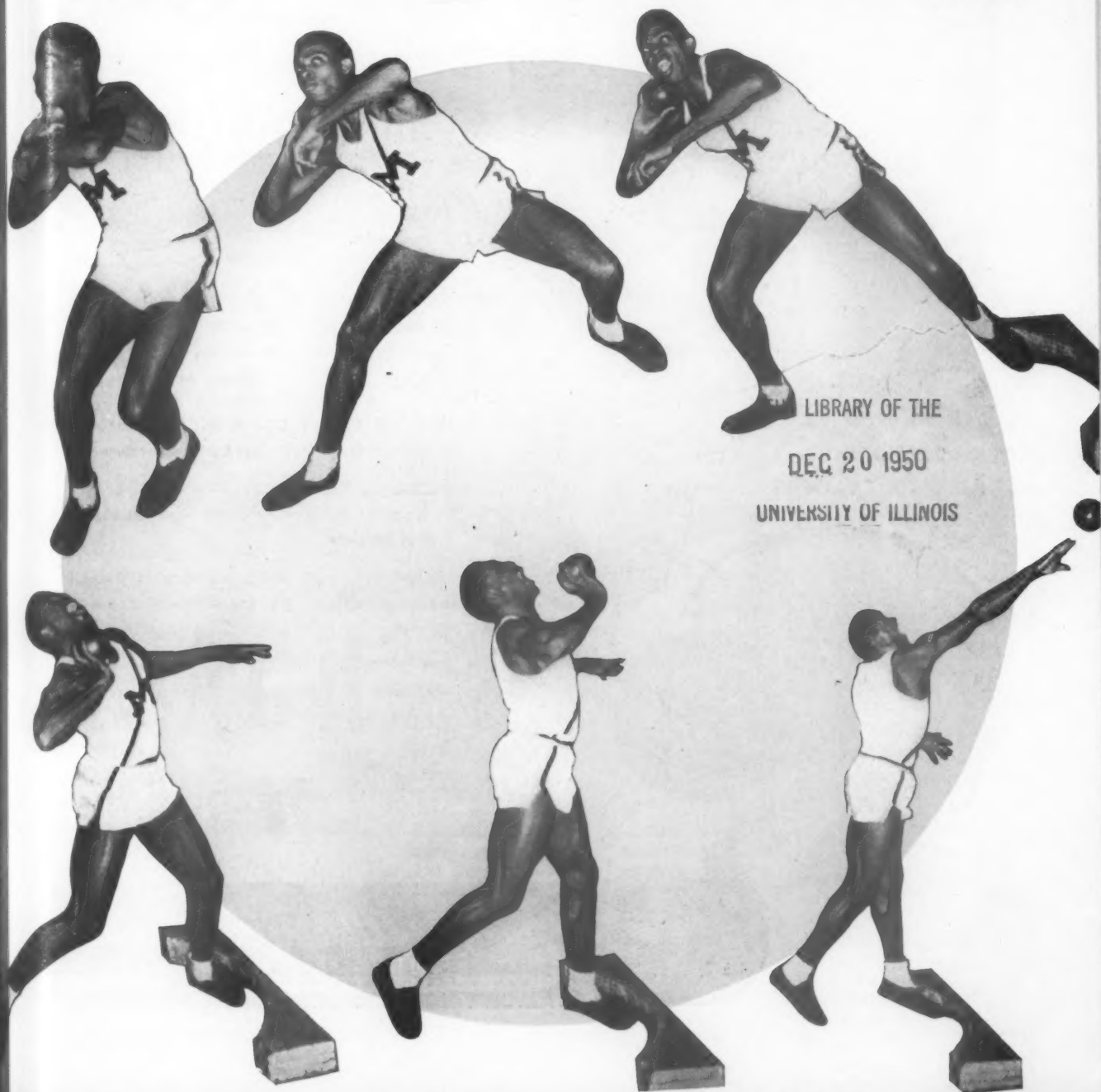


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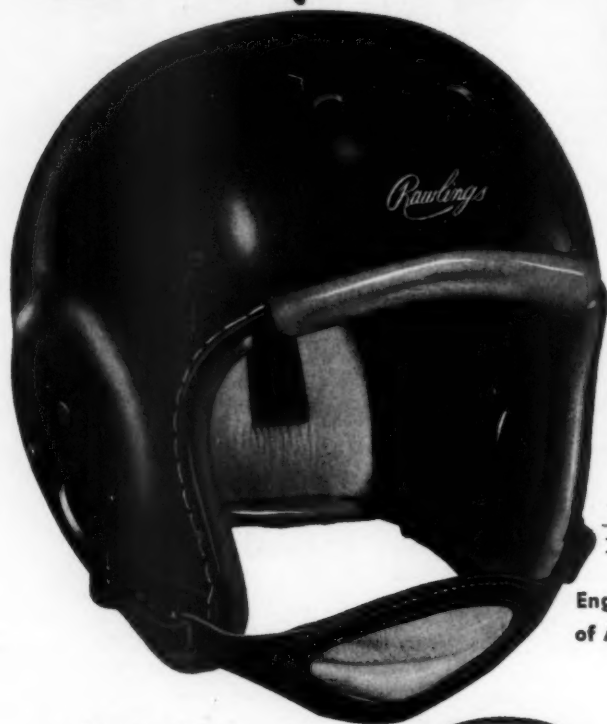
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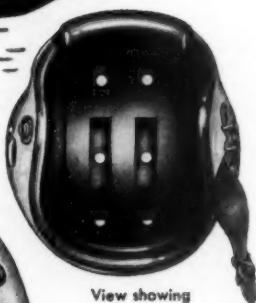


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FRONT COVER ILLUSTRATION

Charlie Fonville demonstrating perfect form in the shot put. For
 a report on the training program that Fonville has undertaken to
 regain the world's record read Don Canham's article on page 28.

3



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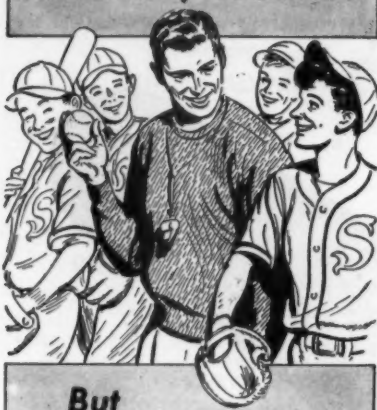


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SINCE 1940, when he took over as track coach at Michigan State College, Karl Schlademan has produced some of the nation's outstanding track teams. Two years ago the Spartan cross-country team captured the first triple crown in the history of the sport, taking team honors in the IC4A, NCAA and NAAU meets. Last year his teams captured both the indoor and outdoor titles in the IC4A and the Central Collegiate Conference and played important roles in such meets as the Drake Relays, the Coliseum Relays in Los Angeles, the Purdue Relays and the Chicago Daily News Relays. Before going to Michigan State, Schlademan coached for 14 years at Washington State College where his track teams won the Northern Division Pacific Coast Conference championship nine consecutive years. . . . The Iba family is well represented in the basketball coaching field. Clarence Iba coaches at Tulsa University, Earl Iba at Panhandle A & M, Howard Iba at St. Joseph, Missouri, Central, and Hank Iba, of course, at Oklahoma A & M. . . . Toledo University, Toledo, Ohio, has an open date Nov. 11 on its 1950 football schedule and desires a game either home or away. Those interested write: Barney Francis, Athletic Director. . . . Jesse Mortensen, track coach and assistant football coach at the University of Denver, will replace Leo Novak who has been Army's track coach since 1926. Mortensen is a Southern California graduate and a former javelin and decathlon champion. Army also announced that Nate Cartmell, assistant coach at Manhattan, will serve as plebe coach and assistant to Mortensen. . . . Norris Patterson, coach at Danville, Illinois, High School, succeeds Pat Bradshaw as athletic director and football coach at William Jewell College, Liberty, Missouri. . . . Herbert "Duke" Brackett, backfield and head baseball coach at the University of Arkansas, has been appointed assistant football coach at UCLA. . . . The University of New Hampshire's 1949 football season was "even Stephen." The Wildcats won four games and lost four. They scored

153 points and their opponents scored 153 . . . Some more of Bob Zuppke's observations on football: "No director of athletics, as a rule, holds office longer than two unsuccessful football coaches . . . No matter what style of offense a coach is using, if he is losing, he wishes he had another . . . A team with poor morale wilts near either goal; a team of eleven good tacklers is hard to beat; a team with too many gold footballs is apt to list . . . Football may be a brutal game but brutes cannot play it."

• • •

HUGH DEVORE, who had a record of 25 wins, 1 tie and 9 losses in four years as football coach at St. Bonaventure College, has been named football coach at New York University succeeding "Hooks" Mylin. Devore was an All-American end at Notre Dame and served as assistant football coach at Providence College and at Notre Dame during the war. Joe Bach, former Notre Dame line star and recently line coach of the New York Bulldogs, has been signed as coach at St. Bonaventure succeeding Devore. . . . Dud DeGroot, who replaced Berl Huffman at the University of New Mexico, will keep Bob Titchenal with him as line coach. The University of West Virginia has selected Art Lewis as coach of football to replace DeGroot. Lewis was line coach at Mississippi State. . . . Eight former members of the University of Oklahoma Sugar Bowl championship teams of 1949 and '50 have gone into coaching. Jack Mitchell, All-American quarterback of the 1948 club, is backfield coach at Tulsa University. Truman Wright, tackle in 1948, is at Paris, Texas, Junior College. Pete Tillman, center in 1948, is coaching at Durant, Oklahoma, High School. From the 1949 club, five men have accepted positions in Oklahoma high schools. Darrell Royal at El Reno, Bobby Goad at Chickasha, Dee Andros at Holdenville, Charley Paine at Kingfisher, and Bob Bodenhamer at Tonkawa.

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The Baseball Trainer

By DICK COHEN

Instructor in Physical Education, New York University

THIS is a short outline designed to give the beginning baseball trainer, high school coach, or anyone connected with a baseball club that does not enjoy the luxury of a full- or part-time staff of trainers, a fundamental knowledge of the principles and practices involved in the training of a baseball club, and to make one cognizant of the different aspects of the field and of the entities involved. My objective in writing this is to acquaint the reader with this field, create an awareness of the importance of the subject to the baseball manager and coach, and perhaps to arouse an interest in the reader to study further and to delve more deeply into this realm.

The trainer of a ball club is not a teacher of skills, techniques or strategy, and as a point of ethics should never discuss these things with the players, coaches or manager. He should never second-guess the manager.

The trainer is the psychological link between the manager and the player and many consider this to be the great difference between the outstanding trainer and the mediocre one. It often happens that the trainer's knowledge of human behavior proves to be his most valuable asset. Too much emphasis cannot be placed on this phase of the trainer's job as often the star player, whose highest degree of skill and ability must be utilized to the fullest extent if the team is to be successful, is a hypochondriac, neurotic, or is sullen or lethargic. In these instances the trainer can make himself invaluable to his organization if he can get the "most mileage" out of this type of emotionally unstable individual.

The trainer should also be a keen observer of his ball players and should notice in the early stages when a player is on the verge of becoming "over-trained". This may be either a physical or a mental condition. In the latter case it approaches being a nervous breakdown. It is the trainer's responsibility to detect this and to report it to the manager with a recommendation that the player be given a day or two off from practice, playing, and the training routine. It is up to the manager, not the trainer, to make the final decision in cases such as these, however.

Many trainers overstep the limits of their authority, knowledge and capability. The trainer must remember that he is not a medical doctor, and in case of a serious injury he should never try to make a diagnosis. If, for any reason, a fracture is suspected, naturally an X-ray is indicated. In the case of the more serious injuries the team physician should make the diagnosis and prescribe the treatment. The trainer should carry out his directions only as specified in these instances.

The trainer should have a thorough knowledge of first aid, protective bandaging and taping. Stretching exercises for all parts of the body and for all types of activities involved are also a necessary part of his education. He must always remember that it is far better to prevent injuries than to treat them. This means much less work and anxiety in the long run and makes for a better and more successful season for all concerned.

Although it may not seem so, the knotty, tight-muscled, burly type of athlete seems to be more susceptible to incurring strains and sprains, torn muscles and tendons, and similar injuries than does the smooth, loose-muscled performer.

Naturally the pitching staff will present a majority of the sore arms that will have to be treated. The infielders, mainly the keystone combination, will come up with a majority of the spike wounds. The catcher will undoubtedly suffer bumps and bruises incurred while blocking the plate on close plays and in getting hit with foul tips. The latter situation will also present a number of broken and split fingers on the "meat hands" of the catching staff.

Training Room Equipment, Facilities, and Supplies

The training table will vary in height according to the height and arm length of the trainer. The object of this is to save the trainer a needless expenditure of muscular effort due to faulty posture and position while performing his various tasks. The table should be twenty-six inches wide and six feet, six inches long. The height should be approximately thirty inches, varying, as I have previously stated, with the height of the

(Continued on page 52)

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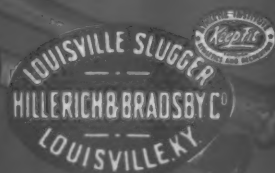
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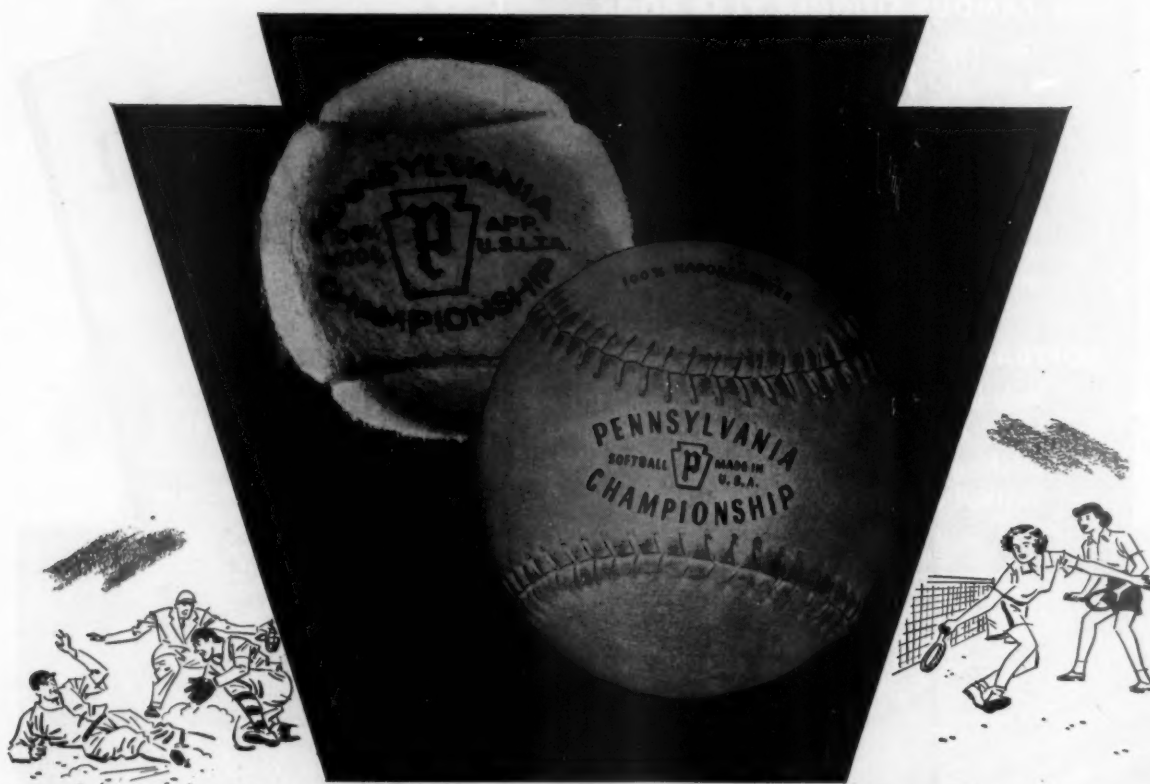


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Illustration 1. Starting position, showing the proper position of the shot and the beginning of the leg swing.

MOST coaches agree that the ideal type of shot putter is a large, powerful man with plenty of speed. At Merced High School, Elmer Willhoite was such a man. He was big—6 feet 2 inches tall, weight, 222 pounds—and fast. He ran the 100-yard dash in 10.4, which gave him the quick reactions necessary to speed across the shot ring. Willhoite worked out dur-

next year, which he did with a throw of 57 feet, 3¼ inches.

In California the track season starts early as compared with the rest of the country. At Merced the track men come out in January and do all forms of calisthenics along with easy jogging and running. This proved to be a good conditioning schedule, as few sore muscles and shin splints developed. Each day a different member of the team led the exercises, which made for good spirit and good-natured criticism for any of the loafers. Also during these first two or three weeks of limbering up, some wind sprints were taken up and down the football field.

At the end of these three weeks of general conditioning the weight men were separated from the rest of the squad and their special training began. The first fundamental taught was, of course, the correct way of holding the shot and the preliminary position (Illustration 1). The weight men were allowed to handle and toss around both the iron and bronze



Illustration 2. Set stance showing rock-over and position after completion of the shift.

putting of the shot without the shift. At first a set stance with the left foot about four inches from the toe board and the right foot near the center of the circle was assumed, with attention given to the correct placement of the right foot. The foot should be pointed slightly toward the rear of the circle rather than straight

Training for the Shot

By **WILLIAM STEVENSON JR.**

Track Coach, Merced, California, Union High School

ing the summer and winter months prior to the regular training season. This may be contrary to those who claim that a man would go stale, but this athlete took a few throws every day, which aided his timing and desire for perfection. Willhoite was second in the 1948 California State Meet, and it was then that he was determined to win the state title the

Illustration 3. Showing forward leg swing and start of the shift.



type of shot. They used puts of fifteen feet to get the "feel" of the ball and which type they preferred. Emphasis is placed on the hold. The first, second, and third fingers are spread with the little finger only slightly bent to keep the lateral balance and give aid to the forward propulsion. Care is taken during these early workouts to keep the shot in the palm of the hand until the fingers can be strengthened enough to move the shot gradually out on them. Some exercises recommended for conditioning the wrist and fingers are: (1) place the hands flat on the wall and, standing out three feet, push vigorously away; (2) push-ups; (3) handstands; (4) continuous squeezing of a sponge rubber ball; (5) hold the shot in the air with the arm extended, gripping the forearm with the other hand and snapping the wrist. This motion strengthens the wrist and shows the importance of the wrist snap at the final release of the shot.

The next step was to work on the

out to the side of the circle (Illustration 2). This seems to add a deeper bend to the right knee, thus giving a greater leg drive to the start of the actual put. After the candidate has tried putting the shot from this stance, he is taught the walk-in exercise which some coaches use as a warm-up before competition. The man should stand at the rear of the

Illustration 4. Release and beginning of the reverse. Notice excellent wrist snap.



circle with the shot resting at the shoulder, then step forward with the right foot toward the center of the circle. The left foot is brought up to the correct position in front of the toe board and the putter is in the position as though he has just completed the shift.

During these early workouts the putter would have one of his teammates hold his right foot when he starts his delivery until the shot has been released from his hand. The benefit of this can be seen because naturally the foot cannot be applying force if lifted prematurely. A line bisecting the circle, front to rear, was drawn. This aided the neophyte in getting the proper line of direction in placing the feet and releasing the shot.

The third step to be taken was the mastery of the leg swing and shift. When a shot putter steps into the ring and begins to swing his leg too much he gets nervous and tense. The sooner the shift is started the better. The beginner swings his left leg forward and backward for poise and balance. As he gets used to the swing, he is told not to swing his leg more than twice.

The start of the shift is demonstrated in Illustration 3. When the left leg reaches the height of the backward swing it is swung quickly forward to gain momentum. At the same instant the push is given with the right foot so that the left foot lands four inches from the toe board and the right foot stops near the center of the circle. Care is taken to observe that the right foot of the putter lands just a little before the left one. If the stance is correct, a rock-over motion is noticed and the momentum is continued on through the put instead of a momentary stop and loss of power. The shift is always practiced with the shot so as to give the proper balance. During the practice of this it is wise to experiment with a long and short shift. Some men make the mistake of putting from too open a stance. A spread of 33 to 36 inches is a good average for high school men.

The angle of the shot in flight is important to maximum distance. The shot should be released at about an angle of forty degrees to gain the most from the put. In order to practice this the weight men stand from sixteen feet to eighteen feet in front of a goal post and toss the shot over the crossbar.

At Merced the weight men practice with the sprinters, taking several starts with the gun to develop quick reaction and also run fifty-yard dash-

es for speed. Each day leg drive is developed by going over a flight of three hurdles several times. For diversion the weight men high-jump, broad-jump and run relays. In Willhoite's case, the training for the 100-yard dash and a lap on the 880-yard relay team developed in him a tremendous leg drive which aided him in the shot.

Training Schedule

After the preliminary limbering up period in January, the weight men start on their early season schedule as follows:

Monday: Jog and walk 440 yards. Perform general body building calisthenics. Master the holding of the shot. Run a 50-yard dash. Stride 150 yards.

Tuesday: Warm up with jogging and striding a 440. Exercise. Begin

WILLIAM STEVENSON JR. graduated from Fresno State College and received his MS at the University of California. At Fresno he earned three letters in track and was captain of the team one year. He was also the conference mile and half-mile champion.

shot work from set stance in center of the ring putting about fifteen times, easy. Practice with the sprinters. Take an easy 220.

Wednesday: Jog 440. Calisthenics. Do some handstands, push-ups and chinning. Put the shot fifteen times from standing position being careful not to get the shot too far out on the fingers. Try seven or eight throws using the shift. Run over three hurdles and continue on for a 100 yards at three-quarters. Jog another 150 yards.

Thursday: Jog 440. Calisthenics. Use finger-pushing exercise. Holding the arm extended, work on wrist snap. Put the shot from the center of the ring and work the shot out a little more on the fingers. Concentrate on leg swing and the shift for about eight puts. Decide which type of swing is the best. Take some starts. Stride through a 150 yards.

Friday: Jog 550. Limbering-up calisthenics. Warm up with walk-in exercise at the shot ring for six puts. Try to keep the elbow high. Using the shift, gradually increase the effort for eight or nine puts. Take four

hard throws. Jog 440 with a 50-yard sprint down the back stretch.

The Competitive or Mid-Season Schedule

Monday: Jog 440. Calisthenics for ten minutes. Do some chinning. Skip rope for five minutes. Warm up by putting the shot three or four times without the shift. Then take five strong puts. Rest awhile and take three puts for distance. Wait a few minutes and take three more trials. Finish practice with a 50-yard dash and stride 150 yards.

Tuesday: Jog 440. General calisthenics with some extra push-ups. Try some wrist-strengthening exercises. Practice starts with the sprinters. Run a 50-yard dash. Warm up with the shot by using the walk-in exercise. Take five puts with the shift. Finish with six puts at full effort. Check to see where these puts are landing. Jog 220 yards.

Wednesday: Jog 440. Limbering-up calisthenics. Work on the discus. Run over three hurdles twice. Work five or six times without the shift. Toss the shot over the crossbar seven times to improve height. Run two 50-yard dashes. Jog easy 440.

Thursday: Jog 440. Take ten minutes of calisthenics. Put four times from the center of the ring. Take six complete puts checking on leg swing and the shift. Go over three hurdles. Stride through an easy 220.

Friday: Jog 440. Limber up with ten minutes of calisthenics. Jog through another 440, easy. Get equipment for Saturday's competition.

Late Season

Monday: Calisthenics. Run over three hurdles. Warm up at the shot ring with the walk-in exercise. Work on perfection from the center of the circle. Take ten puts. Put four for distance. Practice starts with the sprinters. Run two 50-yard dashes. Stride an easy 220.

Tuesday: Jog 440. Calisthenics. Put the shot from the center stance. Check on position of the head, elbow and feet. Take six complete puts. Pay particular attention to use of the fingers and wrist. Run some hurdles. Try high jumping for diversion. Jog through a 440.

Wednesday: Jog 440. Calisthenics. Skip rope for three minutes. Put the shot five or six times from the standing position using the rock-over technique. Take five fairly hard throws. Run over three hurdles twice. Try some broad jumping. Run two 50-

(Continued on page 66)

Distance Running

By TOM DECKARD
Track Coach, Drake University

WHEN thinking about distance running, I like to think of the procedure in developing boys to sustain effort. The first requisite in the training of distance runners is to find boys who are willing to pay the price for sustaining effort, and there is a terrific amount of work involved to pay this price. When one has found these boys, the program of work will break down into three phases: overdistance, pace, and speed work.

We will presuppose an adequate warm-up for a day's work. A warm-up period of jogging, walking, striding, walking, fast striding, and a great deal of stretching exercises is a satisfactory warm-up procedure. I believe in an early instruction of the warm-up period in that it is an important part in the development of a runner. It is during this warm-up period that a boy can give his undivided attention to improving his form, improving his speed, and becoming aware of his errors. Eventually, the runner will gain from the warm-up a physical and mental outlook that will make the day's assignment easier.

Overdistance

In preparing for the track season, it is common knowledge that cross-country background is all-important in laying the foundation of overdistance for the distance runners. Our procedure of starting cross-country runners is very similar to the program of cross-country running that Billy Hayes had at Indiana. It consists of a tremendous amount of walking and running in the early part of the season. The rest of the season is devoted to a lot of overdistance and repeated work on pace over the mile and two-mile courses. We do some work on the track so that we can be accurate on time checks for the various distances.

We have an unusual set-up at Drake in that our cross-country course is on a golf course two miles from the stadium. This fall, we had seven freshman prospects who would run and walk to the golf course and then receive their work assignment when they arrived. The two miles out and two miles back plus the work on the course gave the candidates a great

amount of running, without their being really aware of the miles they were building up as a back-log.

The first four weeks the candidates were instructed to run for a distance at a speed they could carry easily and then were instructed to walk. The distance might vary from 880 to three-quarters of a mile before they would walk. This procedure was repeated and repeated and at the end of four weeks the young freshmen were in fine physical condition. We placed emphasis on having the group stay together in their repeated running as much as they possibly could. At the end of the season the first five runners were very close on three- and four-mile time-trial assignments. In fact, there was never more than thirty seconds between the first and fifth men. On a two-mile time-trial, the first and fifth men were separated by fifteen seconds. I give this example in that I believe the fourth and fifth men were encouraged to keep up with the leaders by repeated walking and running at a pace they could handle. It was also interesting to know that their performances and improvement at the end of cross-country were much better than I could expect in view of their high school performances.

An important thing to remember in overdistance assignments is that the assignment should not be so severe that the runner is forced into a dog trot or a dogging pace before he covers the complete distance. Here again I believe the repeated assignment of a shorter distance will prepare the boy to sustain effort and keep

him away from the habit of getting into a dog trot or so-called "rut," and the mental "rut" that is so common in distance runners.

When one of the candidates has reached the stage where he shows great possibility in sustaining pace he will be aware of it in that the feeling within the runner is that he has complete confidence in his ability to maintain the speed throughout the distance of the run. He may even feel great enjoyment in running at a good pace. On the other hand, if he is not ready to carry a fast pace for a run, the coach will be aware of it in that his speed will fall off somewhere around the middle of the distance, and he will show marked decrease in speed for the remainder of the distance. An example of what I am trying to say is the way the mature Swedish and Finnish distance runners go out and maintain a fast pace for two, four, or six miles. At no time is there any apparent sign of distress or fatigue. The same, of course, holds true for some of our better American distance runners.

The overdistance work assignments are of utmost importance because I feel that without a good background of running, the coach will be unable to train the runner adequately on pace.

Pace Work

Pace assignments will vary among the candidates, and the runners with natural speed will be able to handle pace work with more ease than the slow plodder-type candidates. I like to think of pace work as assignments under the actual race distance at a speed we hope to have the runner maintain in a race. For the one-milers, it will be in the form of three-quarters of a mile, 880's, and 440's. For the two-milers, it will be 1½ miles, 1 mile, and 880's. My workout procedure on pace work is repeated assignments at the shorter distances with enough rest in between to give the boy time to recover only partially. I feel this program helps a boy in learning to hold pace when he is witnessing partial fatigue, and at the same time it is building up his ability to go into oxygen debt. I also feel that repeated pace assignments will im-

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TOM DECKARD graduated from the University of Indiana. He was a member of the 1936 U.S. Olympic team in the 5000-meter run. He holds the world's indoor 3000-meter steeplechase record and the world's outdoor two-mile steeplechase record. He served as freshman track coach at Indiana in 1939-40, track coach at Bloomington (Indiana) High School in 1941-42, and cross-country coach at Indiana in 1946-47. He went to Drake two years ago.

Play of the Offensive Center

By DUKE GREENICH

Football Coach, Cocoa, Florida, High School

FROM an offensive standpoint the center is the most important man on the team. A team is no stronger than its center. He actually is the fuse to the success of a play. The quarterback may call the right play that can result in a first down or a touchdown, but a poor snap-back to the wrong man may mean the loss of a down or even the loss of the ball.

The center has two major responsibilities: first, to center the ball at the right place; second, to center the ball precisely on the snap signal. The two responsibilities are a must. One without the other usually means trouble. If the ball is centered to the wrong place a fumble is likely to result and the team may lose possession of the ball. If the ball is centered before the snap signal the defense charges through the offense. If the ball is centered after the snap signal the entire offensive line is usually off-side. In all systems, including the T formation, the center must be capable of centering the ball directly back to the ball-carrier anywhere from three yards to twelve yards. The pass may be required to go straight back, to the ball-carrier's left or to his right.

The center, if possible, should be one of the larger boys on the squad. This is recommended because a larger boy will be able to hold his ground in the middle of the line much better than a smaller boy. He must have a good sense of balance. Without this, size means nothing, since a little man can push him over with ease after he has centered the ball. Intelligence is the next qualification. A boy who cannot remember to whom the ball is to be centered is certainly going to cause many gray hairs and embarrassing moments.

A center should have a quick and aggressive reaction. He has to react to blocking quickly after the ball is centered. A center has to know the fundamentals of blocking as perfectly as any other member of the squad. This makes the difference between a good center and an average center. Of course, his first responsibility is getting the ball back to the right man. After that he can block as any other lineman does and go down field and try to clear the path for the ball-carrier.

The center's stance should be comfortably balanced on both feet. The

feet are spread in order to pass the ball between the legs. As to the exact distance, experimenting until the individual feels at ease is the only sensible way to solve the proper body balance. To say eighteen or twenty-four inches is like trying to predict the weather. The left foot should be placed in front of the right foot. The average center will find that the toes of his right foot are on a line with the instep or heel of his left foot. The right foot should be placed behind the left so that the right arm has more freedom in passing the ball back.

The toes should be pointed inward, the heels pointing outward. The weight of the body should be on the balls of the feet. The heels should be off the ground. The weight and position of the body should be evenly distributed as if sitting on the edge of a chair. Let us analyze this illustration as to the correct stance of a center.

Assume that you are sitting on the edge of a chair. Now spread your feet with the heels off the ground pointing outward and the toes pointing inward. Move forward, placing your left elbow on your left knee-cap and your right elbow on your right knee. Hold a ball in your right hand. Lean as far forward as you can to lay the ball on the ground, still gripping the ball and keeping contact with the chair. If the chair is jerked suddenly out from under your buttocks you should still remain in position without losing your balance and falling to the ground. The correct stance then, has the feet spread, toes in, heels out, weight on the balls of the feet, left foot in front of the right foot, knees bent but low, back straight, bull neck, right hand gripping the front of the ball, left hand gripping the back of the ball.

The grip on the ball for the center is practically the same as for the pass-

er. The fingers of the right hand are placed on the front of the ball with the little finger on the last or next to the last lace. The left hand is placed on the back of the ball with the thumb on the laces. The left hand acts merely as a guide in the control of the ball, with the right hand and arm propelling the driving force of the snap-back.

The propelling motion is derived from the pendulum swing of the right arm and is guided by the left hand. The right hand is placed under the front part of the ball. The laces are usually facing downward. The wrist is cocked inward at about a right angle. As the pendulum swing of the right arm moves backward between the legs, the arm bends at the elbow. As the elbow reaches the mid-point between the crotch and the right knee, both hands begin to rotate clockwise at the wrist. Simultaneously, the rotation of wrist, the snap of the wrist, and the straightening of the arm are taking place. The rotation of the wrist and hands causes the spiral of the ball. The power and speed of the ball come from the snap and force of the wrist.

The follow-through depends upon the length and speed of the center. For a long center, such as the twelve-yard center for a punt, the elbows of both hands will hit the thighs rather hard. The fingers will be pointing to the spot of the intended ball-carrier with the back side of the hand facing the ground. For a shorter and softer pass, the elbows will barely touch the thighs with the back of the hands still facing the ground and the fingers pointing to the ball-carrier. The snap of the wrist is usually sufficient for a three- or four-yard pass. The snap of the wrist and the action of the elbow are the important phases in the mechanics of centering the ball.

An excellent drill for developing the snap-back is as follows: The center's feet are spread according to the correct stance. His body is erect as a forward passer. Another individual is directly behind him ready to receive the ball. The center starts to throw the ball as if he were going to throw it straight ahead. Instead of releasing the ball as a forward passer would, he retains his grip on the ball.

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DUKE GREENICH played variety football, basketball and baseball at the University of Mississippi. He coached at Woodstock, Illinois; Jonesville, Michigan and at Howe Military School before going to Cocoa.

A Graded Program for Beginning Tennis

By WILLIAM E. MURPHY
Tennis Coach, University of Michigan

(This is the second part of this article. Part I appeared in the March issue.—Ed.)

Level Three — Hitting a Tossed Ball.

The next step in development of the stroke brings with it one new technique to master, namely, timing one's swing to the oncoming flight of the ball so as to meet it at the already described point of contact, just opposite the left hip. This is not difficult to do after one has learned the swing and has hit many dropped balls with this swing. Correct timing becomes increasingly difficult as the speed of the ball to be hit is increased, and as one adds speed to the swing, so it is best to begin with a slowly-tossed ball and an easy swing.

One needs a partner, naturally, to practice hitting a tossed ball. The partner should stand at least thirty feet from the hitter and toss the ball with a smooth underhand swing of the arm so that the ball bounces to approximately the same height and distance from the body as previously described. A few practice tosses may help one's partner to learn quickly to make a good toss. In practicing the toss, one should assume the proper stance and hold the right hand at the point of contact. The tosser tosses a few balls until he is able to bounce it up against one's hand, or very close to it. When he has learned to do this, the hitter is ready to hit the ball.

The two fixed-points method should still be used. Get set at the racket-back position and check all items previously described. Practice a few swings of a speed that is estimated to bat the ball back to the tosser. When the ball is tossed, judge its speed and swing "through" it, timing the stroke so that the racket meets the ball at the correct point of contact, opposite the left hip. Stop at the second fixed point, the *finish* position, without having made any jerky movements or wobbling the wrist. The racket will then point toward the tosser on a level with one's shoulders and the ball should be in his hands about shoulder height. Hold that position and check it.

This level should be practiced until one can hit ten successive balls directly back to the tosser. The tosser

should check the hitter's form as he hits each ball, stressing the two fixed points, the *racket-back* and the *finish* positions.

Before moving on to the next level, Running to Strike a Tossed Ball, one should learn to turn from a waiting position facing the tosser, to a hitting position. This is done by turning the body sideways while crossing the left foot over the right and bringing the racket back to the *racket-back* position, whereupon the ball should be tossed and hit. When the turn can be made and the racket-back position assumed correctly, the ball should be tossed so that the turn and hit become one continuous motion. Check the finish each time.

Level Four—

Running to Hit a Tossed Ball.

Having practiced turning from a ready position to a racket-back position in order to hit a tossed ball, one is now prepared to run a short distance from the ready position before again assuming the racket-back position in order to hit the ball. This should be learned in four steps: 1. Assume the ready position. 2. Turn toward the tossed ball and take the racket back. 3. Run to position with the racket back. 4. Swing and hit.

The first fixed point (racket-back position) cannot now be checked by the hitter as his eyes have to be on the ball until after it has been hit. However, the racket should be taken to exactly the position described in *racket-back* and held there until the forward swing begins. The tosser can check this. At this level the finish position should always be held and checked by the hitter.

Step 1—Ready Position: Assume ready position, eyes on the ball, knees slightly bent, feet comfortably spread, and body facing the net. Hold the racket lightly at the handle in the hit-

ting hand and support it at the throat with the left hand.

Step 2—Turn Toward Tossed Ball and Take Racket Back: Take the first step with the left foot crossing over the right foot while turning the body sideways to the net. Take the racket back.

Step 3—The Run: Run to position with racket back, and assume the proper stance for hitting.

Step 4—Swing and Hit: Swing through the ball to the finish position.

It should be noted that hitting does not occur while on the run, but is always done from a set stance if at all possible. The running is for the purpose of getting one to the proper position from which to hit.

Combining all movements: Assume the ready position and have the tosser toss the ball to one's right at various distances. Turn, take the racket back, and run to position, adjusting the footwork so that one finishes in the proper position to stroke the ball.

Footwork Practice: Upon approaching the ball, just before assuming the correct stance from which to hit, small steps should be taken, if necessary, in order to end with the feet placed properly. A small half-step may be taken at the last moment, if necessary, by advancing the right foot forward even with the heel of the left foot, then advancing the left foot forward to its proper position in the stance.

Additional practice in footwork and ball judgment may be had if the tosser calls "first" or "second" just before he tosses the ball. The hitter should then try to move to position so that he can hit the ball on either the first or second bounce, depending upon the tosser's call.

Variations in the Height of the Stroke: When one is able to run and hit ten consecutive tossed balls directly back to the tosser, one should learn to hit balls at various heights before going on to rallying, which is the final level. While rallying, the ball cannot be depended upon to come back at any pre-determined height, so one must learn to hit balls that bounce to different levels. It will not be difficult to adjust to various heights, however, if, as has already been said, the material so far has been mastered.

WILLIAM MURPHY attended the University of Chicago where he was Big Ten doubles champion in 1938 and '39, Illinois state champ, Wisconsin state champ and runner-up for the National Collegiate doubles championship in 1939.

For a lower bounce than has been used thus far, merely bend the knees until the plane of the swing coincides with the height of the ball, and swing through the ball as before. The bending of the knees is the only change in the stroke. The arm is still back at a 45-degree angle to the ground and the racket is parallel to the ground, directly behind and a little below where the ball is to be hit. The knees are bent throughout the entire stroke. This will be one more item to check at the finish of the stroke when hitting a low ball.

When hitting a shoulder-high ball, the racket is raised to the racket-back position by moving the arm at the shoulder joint only up to a point behind where the ball is to be hit. Everything else is the same and the swing is made as before into the line of flight it is desired that the ball should take.

Fifth Level—Rallying.

Rallying is best begun against a wall or bounding board. Stand about thirty feet away from the wall or board and drop and stroke the ball as taught at the dropped-ball level. Now, however, instead of holding the finish of the stroke, draw the arm and racket back quickly to the racket-back position—at least by the time the ball has hit the ground on its return bounce from the wall. Catch the ball with the left hand just as it passes the left side of the body. In order to make the first rallying shot easier, continue bouncing, hitting and catching the ball in this manner until the return bounce can be caught at the same height and distance from the body at which the stroke was first learned.

When this is accomplished, strike the return from the wall, and as many more returns as possible, constantly adjusting the feet in order to assume the proper stance while hitting. Strive to hit the wall at a point about six feet above the floor.

Practice at this until at least ten consecutive shots can be returned to the wall with good form.

The player is now ready to step on a tennis court, if he has not already been practicing on one. Stand on one side of the net about 30 feet from it, just behind the baseline, and midway between the two sidelines. One's partner should stand in approximately the same position on the court on the other side of the net. Drop the ball and hit it so that it crosses the center of the net, about three feet above the tape. Try to hit the ball directly back to one's partner so that he can

play it on the first bounce. As the ball is returned by one's partner, try to play it on the first bounce also, moving to the ball so that one can play it at approximately waist level. One may have to move forward or backward in the court, or to the left or right, depending upon the length and direction of the partner's shot, but try always to place the body in the proper hitting position before stroking the ball. Remember too, to get the racket back early, so that the swing will not have to be hurried.

Don't try to hit the balls too hard. Concentrate on steadiness and accuracy until one can hit eight or nine balls back in a row. When this has been learned one is well on the way toward developing a good forehand stroke, the fundamental stroke of the game. Only after one has learned to hit a number of balls back consecutively should an attempt be made to hit the ball hard or to a specific area of the court. Only then is one ready for the next phase of the game, which is Tactics or Strategy.

The Backhand

The backhand should be built up to this point in the same manner as was the forehand. Much of the routine for assembling it is already familiar, as it is put together and developed in the same manner as was the forehand. The stroke is built around the same seven points of form and developed through the same five progressive levels of accomplishment.

1. The Grip.

Stand and hold the racket at the throat with the left hand, keeping the hitting surface of the racket perpendicular to the ground. Place the palm of the right hand diagonally across the top of the handle, one quarter of a turn to the left or counterclockwise from the forehand grip. The first knuckle is directly on the top of the handle. Wrap the fingers around the handle, keeping the index finger spread slightly from the middle finger, and place the thumb diagonally up the back of the handle.

2. The Stance.

Stand facing the left sideline with the feet comfortably apart and the racket gripped properly and hanging loosely at the right side. Now advance the right foot a comfortable distance forward and point the left foot slightly toward the baseline. This is the set stance that will be used throughout these instructions on the backhand. Variations from this stance should not be used until at a more advanced stage of development.

3. Point of Contact.

The point of contact, or the point at which the racket strikes the ball, is just forward of the right hip. The racket at this point should be facing directly toward the net, and a ball struck at this point will fly straight back over the net. The arm should be perfectly straight at the moment of impact.

4. The Backswing.

As in the forehand, a wind-up is unnecessary, the backswing being a very simple one. The racket is held at the throat in the left hand, swept sideward and backward from the point of contact, and pointed directly away from the net at waist level, or nearly so. The arm is kept comfortably away from the body, the elbow is just slightly bent, and the wrist is turned back slightly. The body is then turned at the waist so that the right shoulder is slightly closer to the left sideline than is the left shoulder, causing the racket to extend a few inches farther back, or directly over the 5 o'clock position on the face of an imaginary clock if 12 o'clock is off the right shoulder. This is the first fixed point of the backhand. The weight is on the rear of the left foot.

5. The Shift of Weight.

With the racket back to the fixed point position over 5 o'clock on the face of the imaginary clock, merely transfer the weight from the left to the right foot.

6. The Body Pivot.

There is a definite body pivot in the backhand stroke, but it is not so great as in the forehand shot. The body, at the beginning of the swing, does not face directly toward the left sideline, but rotates backward slightly toward the baseline and from this position pivots forward until the right shoulder points in the direction of the shot. The pivot should follow just after the shift of weight.

7. The Forward Swing.

The total arm movement is now made by swinging the arm through the point of contact forward and upward to head height until the racket points toward the net. This brings the racket, arm, and shoulder all in line and pointing toward the net, which completes the full forward swing. The secret of producing a rhythmic stroke lies in smoothly combining these three elements of body pivot, shift of weight, and arm movement.

The backhand stroke should progress through the five levels of development in much the same manner as the forehand. One should progress from

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Making Group Athletics Popular

By HERB GILL

Hockey Coach, Milton, Massachusetts, Academy

WITH the added emphasis on sport activity, I have suggestions which may prove helpful both for competitors and officials conducting programs in the individual sports, such as tennis, golf and squash.

Interest may be increased in these sports if points or awards (or both) are offered. A program that encompasses all groups tends to be loosely supervised and may fail to interest the students. The tendency in many cases is for groups to bat a ball around and kill time to complete the athletic period.

Creates Competitive Spirit

The average boy or girl enjoys competition and welcomes an opportunity to actually engage in games to improve his or her play through added competition. Much unpleasantness may be avoided by stepping-up important athletics for all periods. An "atmosphere" of casual, almost "shabby" athletic periods are not conducive to better athletics. In some cases directors are not aware of the situation; individuals are marked present, yet the careless play isn't reported and continues through a particular season.

My suggestions may well serve to decrease the informal play or large groups, increase the spirit of those participating, and create a far more pleasant atmosphere. One phase of the duties of directors is to offer an interesting set-up for the thousands involved in other than varsity or team-sport groups. This plan tends to improve conditions in several directions for both students and directors.

In suggesting a point system for daily play I do so knowing that, given some opportunity to win points or awards, far more interest is created for the players involved (the system may well include all players) for the leaders endeavor to hold their lead and the others strive to overtake them.

The system may apply both with large groups of a hundred, two hundred or more, as well as with smaller groups probably already familiar with the "ladder" system. Among our groups added keenness was shown when players were actually involved in their first sport competition —

their first athletic contest participation.

Players Arrange Own Matches

My plan for tennis, and the other sports I have mentioned, is as follows: In this particular instance, two hundred men are playing recreational tennis for a period of about six weeks — reporting four days a week for one-hour periods. The names and classes of the players in the group are posted, and announcement is made that the players having defeated the greatest number of opponents within a stated period will engage in a play-off series. The players arrange their own matches, no definite days or hours of play are assigned, and every effort is made to get away from routine. The necessary details of the system are handled by a checker who makes the rounds for attendance each hour and keeps a record of the victories. If the results are not given to the checker, they may be written on slips of paper and dropped in a box placed near the courts for that purpose. The standings can be tallied once or twice a week and either posted or published for the benefit of those participating.

Of course some matches will be decidedly unequal as far as respective abilities are concerned, but I have found that, in general, players seek opponents of their own caliber or of a little higher caliber, and very rarely go after "convenient" matches. At any rate, when a play-off arrives, class will tell. The better players are not likely to meet more than a few of the less experienced men, and if they do acquire a good many wins they can only do so by winning from a proportionate number of different

players, which in itself is good for the group.

Awards Provide Real Incentive

The weekly posting or publishing of the names of the leaders adds interest, and the promise of further competition in the play-offs adds incentive. It is a good plan to divide the season into halves, holding a play-off at the end of three weeks, another at the end of six weeks, and if the winners are different men, matching them in a final contest. For the winners, cups, medals, charms, or athletic passes are all appropriate. If the physical education department wishes to arrange some sort of year-round award, points may also be given on a proportionate basis for each sport involving individual play, and a cup or plaque may be presented at the close of the school year.

In part, this plan provides a continuous daily tournament without the customary clerical work of arranging matches, handling postponements, and so forth. One feature is that players are inclined to be more prompt in reporting, more willing to earn their credits in recreational activity.

Play-Offs Among Winners

As an aid to coaches in charge of varsity, freshman, or other representative groups, a chart may be employed to determine the most consistent winners. On this chart the names of the squad members are listed both vertically and horizontally and are separated by rule lines so that a match between any two members of the squad will be represented by a square on the chart. By having his men post the results of their matches, the coach will be in a position to evaluate his individual players with some degree of accuracy. Just as in the recreational tournaments, this competition will bring the better players to the top, serving as a double check on ratings assigned by other methods. Competition and play-offs will naturally add interest and vitality to squad work; the leaders will be pressed to hold their positions, and betterment will be the goal all around. Often it is

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HERB GILL has coached several sports in quite a few locations: hockey, baseball and football at Eastern prep schools; tennis and hockey at Dartmouth College; baseball at Massachusetts State College and tennis at Benning College for Women, to mention some. Mr. Gill is also wrestling coach at Milton.

Post-War Baseball in West Virginia

By STEVE HARRICK

Baseball Coach, West Virginia University

(Back in the late twenties, interest in amateur baseball declined at such a rapid rate that there was immediate concern as to whether the game would not pass entirely from our sport picture. The American Legion, professional baseball, the American Baseball Congress, the Junior Chamber of Commerce and many other organizations, through their programs, are responsible for the return of baseball as the American game. It must never be forgotten, however, that the sporting goods manufacturers made available thousands of dollars to put baseball back on its feet. It may be that in the future, other sports will face a similar situation. This article is printed to show what can be done.)

BASEBALL has made tremendous progress in the Mountain State during the post-war years through the media of amateur, high school, collegiate, and American Legion play. In fact, it can be truthfully said that baseball ranks as the most popular sport in the hearts of West Virginia boys. The popularity of our "National game" has been particularly noted in the teen-age grades of our high schools and the American Legion Junior program. There are many reasons for this rapidly growing interest in baseball which are not only peculiar to the state of West Virginia but to the entire nation. Perhaps the foremost reason is the new philosophy of education. The traditional philosophy of education with its emphasis on scholarship and intellectual development could conceive of no place for play in educational institutions. In recent years, however, the philosophy of education changed so that education must deal with the whole of a man and not just part of him. World War II leaders time and again cited cases to prove that those trained in competitive athletics prior to entering the services of our country were more capable of protecting themselves in hazards of war activities than those that failed to obtain pre-war training through competitive athletics.

It is generally agreed that public schools exist primarily to help the youth become good citizens in the community. Some of these necessary qualities of useful citizens are loyalty, honesty, self-discipline, self-depend-

ence and the spirit of democracy. These qualities can best be taught to our young boys on the field by actual participation and not by talk. Believing in this philosophy of education, our schools and colleges are now enlarging their physical plants and fields that they will be able to be equipped to make competitive sports for all a reality. The game of baseball adequately fits in this type of a program.

From the figures listed below it is quite evident that the high schools in West Virginia have been providing opportunities in increasing number for boys to learn not only the techniques of baseball but also the basic principles of good citizenship by participating in the game. In West Virginia, there are 82 class A and 144 class B senior high schools. During the first postwar season in 1947, 40 per cent or 92 high schools sponsored baseball. In 1948 the number increased to 74 per cent or 138 schools and in 1949, 85 per cent or 183 schools supported baseball in one form or another. Of these, 70 were in class A and 133 in class B. The boys' enrollment of the participating schools for class A ranged from 81 at Gasaway to 796 at Parkersburg. Of the class B schools that fielded baseball teams, Tanner had a boys' enrollment of 12 and McKinley Vocational School in Wheeling had 112. It is of interest to note that of the 12 class A schools that did not list baseball on their program, nine supported track and three had no spring sports. In the class B group, eight fielded track teams and 21 listed no major spring sports. Two schools were uncertain what sports to sponsor. The

above data has been obtained from the West Virginia High School Athlete, 1949, December issue, published by the West Virginia High School Athletic Association.

Junior High School

On the whole, it is generally true that boys in the upper elementary grades are very little concerned about the finer points of a sport. They prefer to play baseball for the sake of enjoyment and care little about the technical details of throwing, catching or batting a baseball. Boys in grades 7, 8, and 9, however, are ready to learn the fundamental skills in the proper way. They want to learn how to throw a curve, how to bat and bunt and how to play the various infield and outfield positions. At times they even try to emulate big-league baseball players at this age. Likewise, the "gang spirit" is present at this stage which makes them ready for team play. It is obvious, however, from a study of junior high school programs that there is a lack of opportunity for boys to participate in baseball. Only 6 out of 51 schools listed baseball as a part of their program during the 1949 spring season. Better facilities, capable leadership and harmonious co-operation of the school boards and the community will bring enjoyment and healthful recreation for many boys at this age level.

American Legion Program

Too much credit cannot be given to the leaders of the American Legion Junior Baseball Program for the extensive and successful promotion of the sport on a state-wide basis. The season of 1949 was by far one of the most fruitful years since the program was founded in 1926 by Dan Sowers of Fairmont, West Virginia. Approximately 1200 teen age boys participated on 72 teams sponsored by the service organizations throughout the state. Although not all of the teams participated in the state tournament competition, the boys derived the benefits from the sport for which the program was designed, namely, to inculcate the spirit of fair play, understanding, mutual respect

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STEPHEN HARRICK graduated from West Virginia University. After playing professional baseball for two years he served as assistant football coach and varsity baseball coach at West Virginia for eight years. He then served as coach of football, basketball and baseball at W. Va. Institute of Technology for 13 years before returning to his alma mater.

State Requirements for Physical Education Teachers and Coaches

This article lists the state certification requirements for secondary school teachers of health education and physical education and for athletic coaches. This data was gathered by Frank S. Stafford, specialist for Health Education, Physical Education and Athletics of the Federal Security Agency, Office of Education and appeared in Bulletin 1949, No. 16. We are indebted to Mr. Stafford and the Office of Education for permission to reprint parts of the bulletin.—Ed.

Alabama

A teacher must hold a secondary certificate with a major or minor in health and physical education. There are two classes of secondary certificates. A certificate is required for the athletic course.

Arizona

Health and physical education teachers in secondary schools must have a regular secondary certificate and at least a minor of 15 semester hours in physical education or a special health and physical education certificate based on 18 semester hours of education and psychology courses, five semesters' practice teaching in physical education and health, and a total of 30 semester hours in the field of physical education and health.

The athletic coach in the secondary school must meet the same requirements as the teacher of health and physical education.

Arkansas

Teachers of health, safety, and physical education must be graduates of an approved 4-year college. Certification requirements for teachers of health and safety are included as part of physical education. General requirements for this degree include courses in English, social studies, science, art or music, physical education, health, safety, and general psychology; and special work in basic education courses and courses in techniques of teaching.

No special certification other than a regular high-school certificate (completion of 4-year college course) is required for an athletic coach.

California

The "Special Secondary Credential in Physical Education" authorizes the holder to teach physical education in elementary and secondary schools.

The holder of such a credential must have a bachelor's degree, with 16 semester hours of work in English, science, social studies, and physical education; 15 semester hours of work in professional education; at least 15 semester hours distributed among four of the following subjects: Biology, anatomy, physiology, hygiene, psychology, sociology, chemistry; 24 semester hours in physical education with a minimum of six semester hours in activities in physical education.

"The General Secondary Credential and the secondary supervision or secondary administrative credential may be used to supervise either the physical education program or the health education program."

Athletic coaches must hold either the Special Secondary Credential in Physical Education or the General Secondary School Credential.

Colorado

In order to get a certificate to teach in the high schools, an applicant must hold a bachelor's degree or equivalent degree with 30 quarter hours of credit distributed among at least three of the following groups, one of which must be practice teaching: general and educational psychology; principles of education; history of education; administration and supervision of education; practice teaching; special methods; philosophy, sociology, anthropology, biology, political science.

Connecticut

The teacher of physical education must have a degree from an accredited college certifying the completion of an approved 4-year teacher-training course in this special area. This requirement is applicable to teachers in the elementary grades as well as in the junior and senior high schools.

Delaware

Health and physical education teachers in the elementary and secondary schools must hold a bachelor's degree in a standard college or university, with special work in these particular subjects including 60 semester hours—six of which must be in methods of teaching the subject; six in practice teaching; and six in professional subjects.

Athletic coaches.—Only full-time teachers regular certificated and employed in the schools shall coach, as-

sist in coaching, or direct high school athletic teams.

Florida

A physical education teacher must have completed a 4-year course in a standard institution. The requirements are: "Physical Education—Restricted (grades 7-12)" 12 semester hours in physical education, including not less than three semester hours in theory and practice of coaching of athletic sports; three semester hours in theory and practice of physical activities; three semester hours in principles, policies, procedures, and administration of the program of physical education.

"Physical Education (grades 7-12)"—30 semester hours in physical education, including not less than six semester hours in theory and practice of the coaching of athletic sports; six semester hours in theory and practice of physical activities; six semester hours in principles, policies, procedures, and administration of the program of physical education; three semester hours in administration of recreation program; three semester hours in nature, structure, and function of the human body.

Georgia

Physical education teachers are required to have "12 semester hours (physical education), but local people may employ any one without this training." There are no requirements for health education teachers, supervisors, or coaches, except those that may be established locally.

Idaho

Twenty semester hours of education, 15 semester hours of physical education, and 15 semester hours of health education are required for a secondary school certificate.

Athletic coaches must have 20 hours of education and 15 hours in each of the two teaching fields.

Illinois

Health and physical education teachers are certificated by issuance of either a high-school certificate or a special certificate in the field. The high-school certificate may be obtained by prospective teachers presenting evidence of graduation from a recognized institution of higher learning with a minimum of 120 semester hours, including 16 semester hours in the field of education with a major of 32 semester hours and a minor of 16 semester hours, or three minors of 16 semester hours each. The special certificate requires the maximum of 36 semester hours in the special field; the minor requirement is waived, and instead the applicant must have a minimum of eight hours of English,

six hours of natural science, six hours of social science, and six hours of the humanities.

Secondary supervisors or directors of either physical education or health education must have a supervisory certificate which may be issued only after they have four years of teaching experience.

Athletic coaches must be certified as teachers.

Indiana

Health and physical education: Credit for 40 semester hours distributed as follows:

1. Approximately three-eighths of the hours in health and safety education with a minimum of two hours in each of these subjects: Zoology or animal biology, first aid, and safety, personal and community hygiene, organization and administration of school health program, physiology and human anatomy.

2. Approximately one-half of the hours in physical education, with a minimum of two hours in each of these subjects: Orientation and organization, tests and measurements in health and physical education, highly organized sports, gymnastics (tumbling, apparatus, tactics, calisthenics, body mechanics, individual athletic events), activities for the elementary grades.

3. Approximately one-eighth of the hours in public recreation, including crafts, dramatics, music, mass or group games.

Iowa

A Standard Secondary Certificate, valid for a 5-year term for teaching in grades 7 and 8 and in high school, is issued upon completion of a 4-year course with specific and professional training for teaching two or more secondary school subjects. A person who holds such a certificate may teach physical education, provided he has ten semester hours of college credit in the subject. Physical education teachers who teach health are expected to have at least one course in the field of health.

A certificate is issued which is known as a 5-year special physical education certificate valid for teaching physical education in both the elementary and high school grades. A physical education certificate requires a degree or diploma from an institution approved by the Board of Educational Examiners and the same professional training as that required for standard secondary or advanced elementary certificate, with a major of 20 semester hours in physical education.

Coaches of athletic teams are ex-

pected to have either a standard secondary certificate with ten semester hours in physical education or a 5-year special physical education certificate.

Kansas

All teachers must hold a Kansas certificate valid for the position for which they are employed, and teachers in all 6-year secondary schools shall meet the same certificate and teaching-field requirements as teachers in the regular 4-year high school. The amount of preparation in physical education varies as to the classification.

Kentucky

The "Provisional High School Certificate," valid for four years, shall be issued to a person who meets the general requirements of law and the regulations of the State board of education and files a transcript of standard college credits showing the completion of 45 semester hours of minimum, general, and core requirements, and in addition completes an area of concentration in health and physical education.

Louisiana

Secondary school health and physical education teachers must have the following State requirements for certification: A baccalaureate degree from a 4-year approved college or university; a minimum of 50 semester hours of general education; 18 semester hours of professional education, and 41 semester hours of health and physical education. Eight hours of the general education requirement must be in health and physical education, and these eight may be counted as a part of the 41 required.

Coaches and special teachers of health and physical education must meet the same requirements as teachers.

Maine

A non-professional grade physical education certificate and a professional grade certificate are issued in Maine. The non-professional grade has three types.

In addition to the non-professional grades, three professional grade certificates are issued.

Maryland

Four years of work on the college level is required for a high-school teacher's certificate. The requirements include 16 semester hours in secondary education and approximately 30 semester hours in the special subject to be taught. Rank in the upper four-fifths of the class and a grade of at least C in practice teaching in the special subject, (D being the passing grade), are necessary. Credit for special methods in the subject must be

presented. The 30 hours in the subject should include: Foundation sciences, with anatomy and physiology; personal and community hygiene; and courses in physical education and health education, with physical education activities throughout the 4-year course; introduction to physical education; protection and emergency care of injuries; nature of play, leadership organization, mechanical analysis of activities and mechanical-anatomical analysis and physiology of activities. This certificate covers both health and physical education.

Massachusetts

There is no State certification in Massachusetts "for any teacher of subjects in the curriculum, except in a few State-aided rural schools; special classes (for physically and mentally handicapped children); and certain vocational teachers."

Michigan

The minimum requirements for health and physical education teachers employed at the secondary level are 15 semester hours of credit in the field. No certificate is required for coaches.

Minnesota

In Minnesota, if teachers in the field of health and physical education spend more than half of their time teaching in these fields, they must have a major in health and physical education from an accredited teacher-training institution.

For less than half-time teaching in the field, applicants are required to have a minimum of nine quarter hours of professional preparation in health and physical education, including at least one course in theory and a distribution of courses in activities.

Mississippi

Beginning with the session of 1947-48, all high-school teachers are required to have minimum content training in quarter hours in each subject taught. The minimum in physical education includes 12 quarter hours in health education and 12 quarter hours in physical education.

All secondary school teachers are required to have 27 quarter hours of professional training.

Missouri

Standards for certification of secondary school teachers require a baccalaureate degree, completion of sufficient college work in at least one subject field to meet standards for certification and approval for a teacher in first-class high school, and a total of 25 hours of college work which may be selected from a minimum of three of the following fields: English

(Continued on page 40)



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JOHN L. GRIFFITH
Publisher

Over-Emphasis On Athletics?

EVERY once in a while some one sees fit to attack the over-emphasis that is placed on athletics. Occasionally the attack is against interscholastic athletics. These critics are wont to attack the large crowds, the pressure on the athletes, etc., and fail to see the underlying values. Dean Harshbarger, a seventeen-year-old high school senior and son of Coach Don Harshbarger of Oak Park, Illinois, High School penned the following after watching the finals of the state tournament and which his father forwarded to us. Dean Harshbarger caught something which the critics fail to see, namely the inherent good in athletics. His report in his own words follows:

"Today we hear much criticism of the over-emphasis placed on interscholastic athletics, but few articles are written defending this emphasis. I have just recently witnessed an incident that clearly portrayed one favorable influence which interscholastic athletics have on the boys who participate in them.

"The scene was the Huff Gymnasium in Champaign, Illinois, and the final game of the state basketball tournament had just ended. Mount Vernon had repeated as state champion, and their all-state center, Max Hooper, had set scoring records for a single game, 36, and for the four games of the tournament, 104. Immediately after vanquishing Danville in the final game 85-61, the team was surrounded by frenzied spectators. Standing directly above them in the balcony, I could witness the proceedings. Hooper, a star more publicized than any other high school basketball player in Illinois, solemnly shook hands

with and firmly embraced first his teammate, Eddie King, and then another teammate, Walter Moore. Then all five players joined arms and stood in a group talking over a microphone to the folks in the radio audience.

"It was Hooper's act of putting his arm solidly around his two teammates that was to me symbolic of the need for athletics in our way of life. You see, Walter Moore, one of the teammates in the huddle, is a Negro boy. By his one simple gesture of comradeship and loyalty, Max Hooper clearly displayed to the 7,000 fans in that gymnasium one of the most important results of high school athletics. It was an answer to one of the greatest problems facing this nation of ours, and showed truly American emotions on the part of the Mount Vernon team, and especially its star center, Max Hooper."

The Advancement of Athletics

FOR the past several months the sport pages have devoted considerable space to naming the outstanding individuals in the various fields of sport, and the outstanding sports events during the past half century. We should like to record the events, organizations and individuals that in our opinion have done the most for the promotion and advancement of athletics.

One. The National Federation and the state organizations deserve top spot in our list for the manner in which they have regulated high school athletics and kept it free from commercialization. Through its programs high school athletics has become the fountainhead of amateur athletics.

Two. World War II. Seldom does a war bring any benefits, but in this case it dramatically pointed out the poor physical condition of our youth. As a result the importance of physical education and athletics was realized and many states changed curricula devoting more time to them. World War II also confirmed the findings of World War I that athletes possessed a certain quality that made them stand out as leaders.

Three. The ability to participate in athletic activities after dark due to floodlighting has made these activities available to millions who could not formerly partake either as a spectator or active participant. The increased attendance from night contests has been a boon to the smaller schools and colleges and night contests will undoubtedly play and even more important part with the growth of television.

Four. The tremendous strides in safety in athletics through the combined effort of manufacturers, administration officials and rules organizations

(Continued on page 67)

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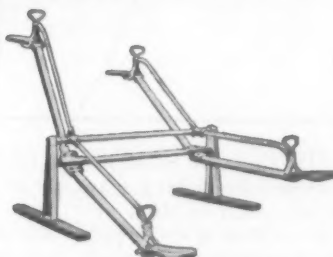
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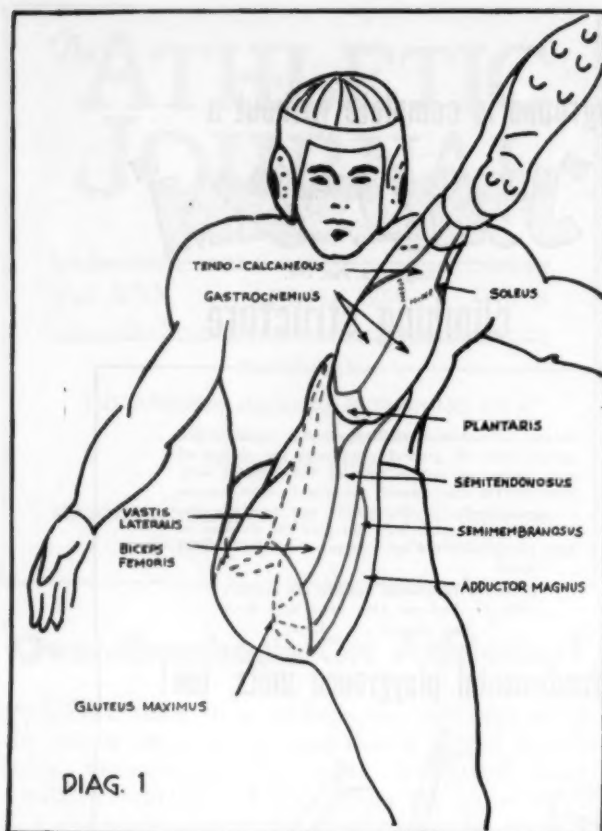
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A Muscular Analysis of the Punt

By **GEORGE H. ALLEN**
Football Coach, Morningside College



GEORGE H. ALLEN played varsity football at Marquette University and Alma College. served as an assistant coach in football at the University of Michigan before going to Morningside. Last year his team placed second in the nation with a team punting average of 44.8 yards for schools with enrollments of 5000 or under.

A KNOWLEDGE of the muscular action employed in kicking may serve the football coach in three respects: 1. It gives him a vivid picture of the relationship between good form and proper muscular action. As such, it serves as a basis for the teaching program. 2. It directs attention to the specific muscle groups which require development and massage. 3. It offers a key to the factors which induce fatigue.

Muscular work is performed by a change in the form of the muscle. The phenomenon is known as contraction. In kicking and other athletic skills, muscles can be contracted at will to any desired degree. In other words, there are many grades of contraction and relaxation.

Before we can understand the muscles involved in kicking, we must first become acquainted with their locations, to some extent their origin and insertion, and finally the names and functions of the muscles of the leg, thigh and foot.

In the articulation of the body, we make use of terms such as abduction, adduction, extension, flexion, inversion and plantar flexion.

All these movements are variations from the anatomical position, which is standing erect in the position of

attention with hands supine.

1. *Abduction* — raising a member of the arm or leg forward from the anatomical position. For instance, raising the arm upward and away from the body. 2. *Adduction* — returning the arm or leg to its normal position — the opposite of abduction. 3. *Flexion* — the bending of one member of the arm or leg, e.g. bending the forearm upon the upper arm. 4. *Extension* — opposite of flexion, e.g. straightening out a limb which is in the state of flexion. 5. *Inversion* — turning of a limb inward or medially, e.g. toes turned inward. 6. *Plantar flexion* — extension of the foot at the ankle with toes pointed downward.

At this time, we are principally interested in the three groups of muscles; those of the thigh, leg and foot. We shall take each group separately and in conclusion see how they all act in unison in accomplishing the kick.

Kicking

Kicking a football consists fundamentally of flexion of the hip and extension of the leg at knee of the same side at once — a movement that can be made by action of the

rectus femoris alone, which is one of the four muscles of the quadriceps femoris. In the mildest kick this may be all that is necessary. In vigorous kicking the sartorius and all the extensors of the knee and all the flexors of the hip that do not interfere with extension of the knee are used. There are more muscles involved here, but we are only concerned with the superficial groups, that is, muscles closest to the exterior. As these muscles are contracted to raise the thigh, the antagonistic muscles (hamstrings) must be relaxed, for their action would prevent both movements.

Kickers who cannot get legs and feet high for a complete follow through may trace this fault to improper contraction or tightening of the hamstring group. Some boys may have over-developed this group in relation to other muscles of the leg, and that would restrict their actions somewhat.

Ankle Snap In Kicking

In analyzing what is commonly known as the ankle snap involved in kicking, we must consider the group of muscles involved in raising the leg upon the thigh in extension. The

(Continued on page 30)

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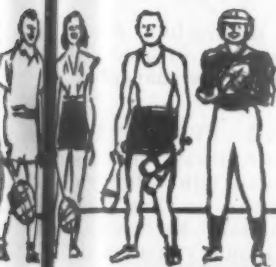


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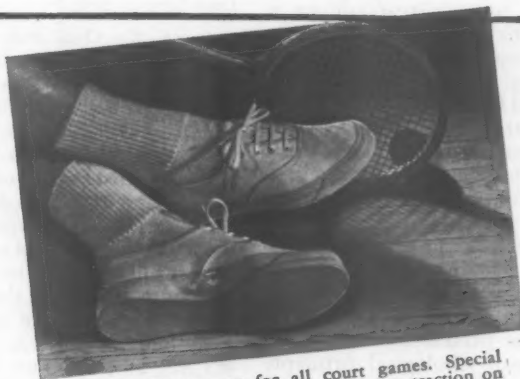
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Baseball Play-Situation Drills

By **EVERETT S. DEAN**
Baseball Coach, Stanford University

and

CHARLES R. BUSHONG
Assistant Baseball Coach, Stanford University

BASEBALL is a "fast reactor's" game. A baseball player's ability is influenced greatly by the speed with which his nervous system functions. Coaching and practice seem to have little effect upon fundamental reaction speed, which determines the speed of a batter's reaction to a pitched ball or an infielder's reaction to a "bad hop". However, coaching and drill can appreciably lessen the time required for certain reaction patterns that are present in baseball play-situations. Play-situation drills could probably be used to a much greater extent by scholastic baseball coaches. We feel that the caliber of scholastic baseball can be tremendously improved by the use of this method in the teaching of baseball to youngsters.

The drills presented herein are based on the psychological principle that life-like learning is the most effective learning. We have applied this principle to our baseball teaching by making our practice sessions and our play-situation drills as life-like, or "game-like" as possible. The following are samples of play-situation drills that are "game-like" in almost all respects except for the control of the start of the play. Our plan provides approximately three hours per week for these drills during the early part of the season and allows at least one hour per week during the latter part of the season.

Sample Outfield Throw-in Drill (Diagram 1). A. DEFENSE. One pitches to 2. C fungoes base-hit to 9 at x. Eight backs-up the play. Nine fields the ball and throws to plate aiming throw at cut-off man's chest. Three runs to cut-off position and handles cut-off if called for. One backs up home — 30 feet behind the plate. Four covers second and 6 backs-up possible throw to second (from 9 or 3).

B. OFFENSE. R1 runs for home after C fungoes hit, rounding third base as illustrated. R2 runs for first after C fungoes hit, rounds first as illustrated and goes to second if possible.

C. COACHING PRINCIPLES. In

our system, 3 is the cut-off man on all throws to plate from all outfields. Six is the cut-off man on all throws from outfield to third. One backs-up all throws to third and home from outfield, 4 is relay man on all long hits to right and center and 6 for all long hits to left.

Bunt—No Outs and Men on First and Second (Diagram 2). A. DEFENSE. Infielders in slightly. Six holds R1 on by standing on or near the bag. One pitches. C rolls bunt to x. Runners break. One charges toward third-base line, fields ball, pivots, and throws ball to 5 for the force-out. Three charges up the first-base side and 4 covers first (on all bunts). Five edges in until he sees that bunt is 1's ball, then retreats and covers third. If bunt is too hard for 1 to handle, 5 fields it and throws R3 out at first. Two calls play and play is backed-up as illustrated.

B. OFFENSE. After the fundamentals are mastered, a regular batter should be used to do the bunting. The proper bunt is a hard one down the third base-line that makes 5 make the play at first. Any other kind of a bunt is almost a sure out at third if defensive team is well-coached. Runners make sure bunt is down before breaking.

Pitcher Covering First (Diagram 3). A. DEFENSE. One pitches to 2 and C fungoes groundball to 3 as pitch crosses plate. R runs to first in timing with the fungo. One covers first as illustrated, and 3 feeds ball to 1 underhanded and chest-high at point x, two steps from the bag. Three is moving toward the bag when he makes the toss. Play is backed-up as illustrated. C eliminates guessing

and false starts by placing bunt down the third-base line once in a while, in which case the defense changes as for a bunt.

B. COACHING PRINCIPLES. The pitcher should always end his pitch with a smooth follow-through into a good defensive position (feet square and weight low). In covering first, the pitcher should run towards a spot 30 feet up the base-line and then round off until he is running straight down the base-line. He tags the bag on the inside with right foot if possible.

Run Downs (Diagram 4). A. DEFENSE. R allows himself to be picked-off first by 1. Three allows R to go approximately half way to second, then throws to 6 coming across second base (a). Six runs R back at top speed, faking throws to keep R's attention. Three runs down the line a few feet and slips in behind R. At the proper time 6 throws to 3 who tags R out. If R does not commit himself enough for 6 to make this throw, 6 runs R down and tags him out. Play can be started with a pick-off at another base or by throwing to a base ahead of an advancing runner.

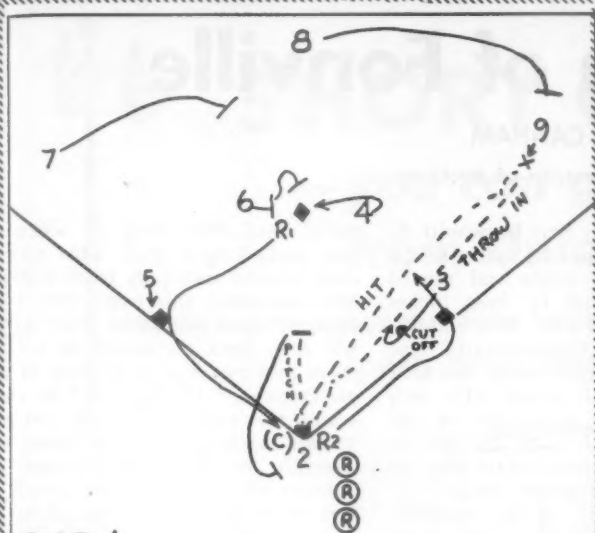
B. OFFENSE. Practice on evasive running and evasive sliding.

C. COACHING PRINCIPLES. The runner should always be run back to the base he left and should be run back at full speed. Only one or two throws should be used (except when there is a runner trapped between second and third or between third and home and additional time is wanted to draw a following runner into a vulnerable position). In case R is not caught by the man who sneaks in behind him, each succeeding thrower should follow his throw around to the right and back-up the play coming the other way (illustrated by the circle-lines in the diagram).

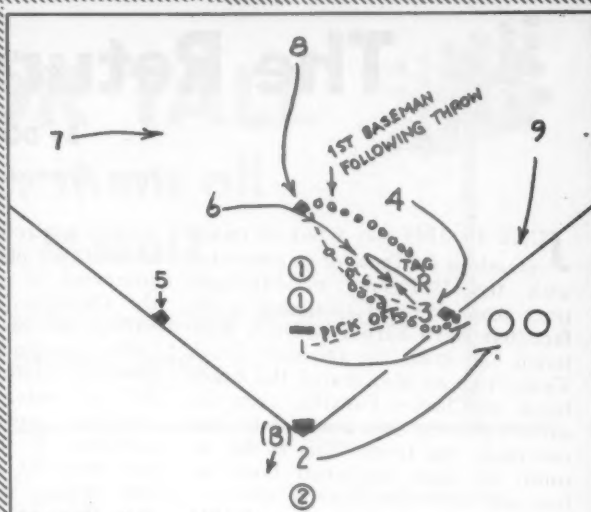
Double Play, 1-6-3 (Diagram 5). A. DEFENSE. One pitches. C fungoes groundball to 1 at x. One fields ball, pivots, and throws without hesitation to 6. The throw should be chest high and with the proper lead.

(Continued on page 62)

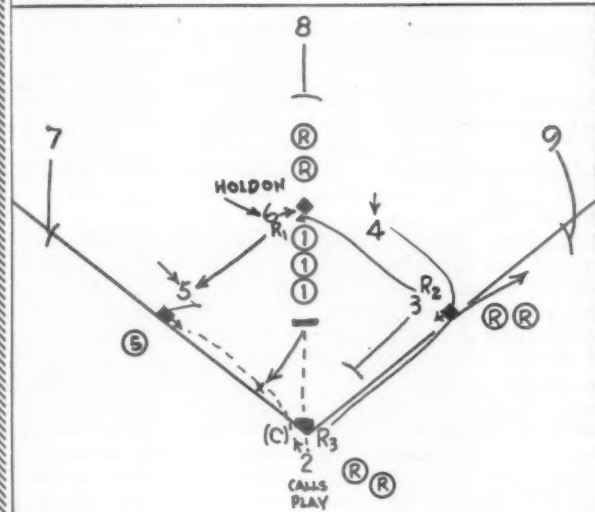
EVERETT S. DEAN is known most widely for his excellent basketball teams. He is the author of the famous "Progressive Basketball" and is one of the nation's leading coaches. Last year he took over the duties of baseball coach at Stanford.



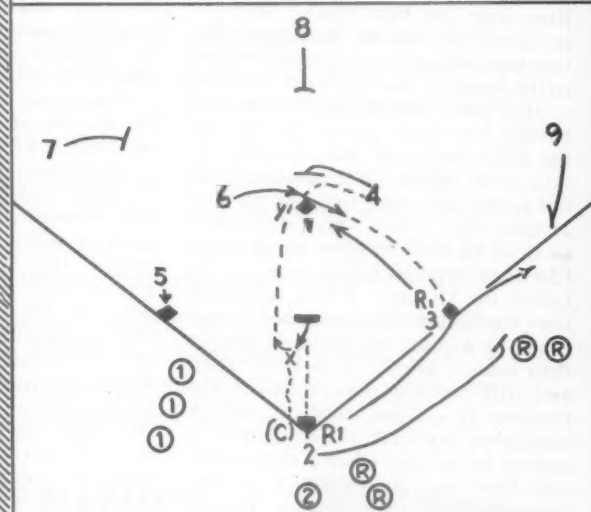
DIAG. 1



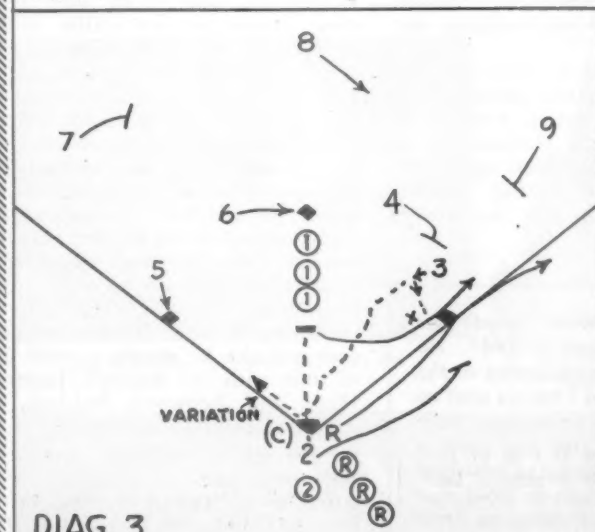
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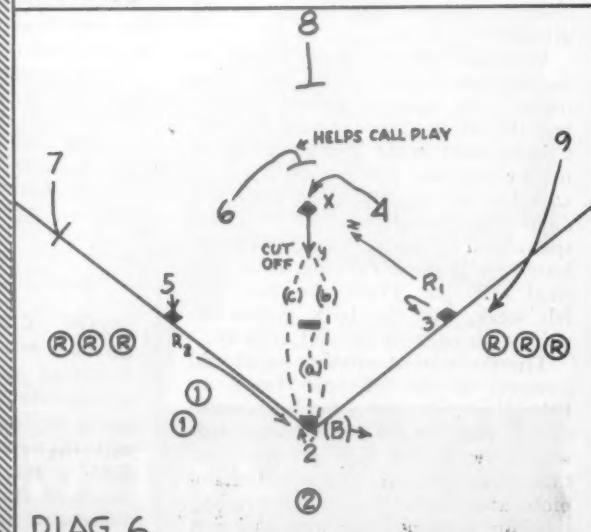
DIAG. 2



DIAG. 5



DIAG. 3



DIAG. 6

The Return of Fonville

By DON CANHAM

Track Coach, University of Michigan

JULY 10, 1948 was a day of mixed emotions for those of us associated with the University of Michigan track team. We were elated over the fact that Herb Barten and Eck Koutonen had made the Olympic Track Team; but we also shared the heart-break of Charles Fonville, then the world's greatest shot putter, who had not made the team. This is the account of what happened both before and after that day.

Let's start with the spring of 1948 when Fonville surged into the headlines with the first 58-foot shot put in history. It was at the Kansas Relays that he put his new world record in the books. It was the week previous to that meet that he first mentioned having low back pains, and it was the following week that the first X-rays were taken. The pictures did not reveal any cause for concern, and at that stage a few days rest seemed to clear up the condition completely. Charlie competed in six more meets before the Olympic Trials, and each time the back trouble returned, sometimes to a more pronounced degree than others. More X-rays were taken and still nothing showed up in the pictures. It was not until the NCAA meet that his back really became a serious handicap. Charlie's performance there was good enough to win, but following the meet, a muscle spasm set in on the left side that caused considerable pain and was very difficult to relax.

We returned to Ann Arbor on Sunday and the doctors properly diagnosed it as a case of pinched nerves, but the cause could not be located. Charlie went to the hospital on Wednesday and was put flat on his back with his feet weighted down for five days. This treatment relieved the spasm and all pain. When he was released on Monday evening before the final Olympic Trials, he naturally felt weak, but the back caused no pain, at least with normal activity.

The decision of whether he should compete in the Olympic Trials on Friday was, of course, made on sentiment. Here was a boy who had worked with one goal in mind for three years. He was the world champion, and it was a chance of a lifetime for a young man who had seen very little good fortune come his way during his twenty years. The

doctors assured us that he would do himself no permanent harm, so he competed in the trials and missed the Olympic Team by four inches with a put of 54 feet. Two months before that meet Charlie could have qualified in his sweat suit, but that did not enter his mind. His only comment was a repetition of the statement he had made on his return from the Kansas Relays after he had broken the world's record. At that time he said in all sincerity, "Some days some fellows just throw it farther than the others." And that was his statement at Evanston after the greatest disappointment in his young life.

That is the background of what has become one of track and field's greatest comebacks.

The following fall Charlie returned to school and for the fourth time we had extensive X-rays taken from every possible angle. This time we located the source of the trouble. The doctors found an unfused vertebra in his lower back. It was a small piece of bone floating free that was not attached to the vertebrae. The only solution was an operation. The operation itself involved grafting a bone segment from his hip into his back. It consisted of fusing three vertebrae solid. This was done in October of 1948, and Charlie remained in a cast for four months and wore a brace for five more months. His only activity was walking during this period.

Charlie returned to school this fall, 1949, and immediately started to jog and do light exercises. Frankly, at this time, only the doctors felt he might be able to compete again. We certainly felt shot-putting was too strenuous. At any rate, he worked

daily until November 15 when he first picked up a shot. That day he took several easy puts from a stand. We continued this easy, slow work from a stand for about four weeks, but each week he would do a little more and put a little harder. It was on December 15 that he first came across the circle. His first put was 48 feet. As he gained confidence and strength, we began to increase the amount of work; but we never let him do as much as he wanted to, for like all great champions, he has a tremendous desire and capacity for work. Charlie has now reached the point where his speed is returning and although he is and always will be rigid in his lower back, he is finding himself able to come up into his puts to a greater degree.

To us the remarkable thing about Charlie Fonville is his ability to approach the shot-put circle knowing just what has been done to his back, and still not being timid or cautious about his putting. He has complete confidence in the physician who performed the operation, and he feels, as does the physician, that with proper exercise and care his back trouble is a thing of the past.

As to the future, we cannot get excited about the boy attempting to regain world supremacy in the shot put. When Charlie put 55 feet one inch in his first meet this year, many felt he was well on his way. What these people do not realize is that he must spend hours doing resistive exercises for the development of the right side of his body to prevent future difficulty. As all track coaches realize, right-handed putters build up the left side of the back which naturally causes some curvature of the spine. Normal backs can stand this slight curvature, doctors feel Charlie's cannot. Thus, he cannot afford again to have the left side so highly overdeveloped. He must keep an even back development. Before and after each practice he spends a good deal of time with our trainers, James E. Hunt and Lenwood Paddock, on strenuous exercises to compensate for his putting development of the left side.

Fonville has given us many thrills, but none like the 55 feet one inch put in his first return to competition.

(Continued on page 55)

DON CANHAM graduated from Michigan in 1941. He was high jump champion at the Drake Relays in 1940 as well as being National Collegiate champion that year. His best mark is 6'7 1/4". He became assistant coach at Michigan in 1946 and succeeded Ken Doherty as head coach in 1948.

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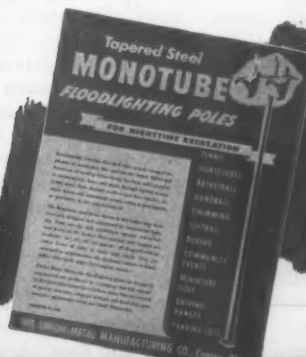
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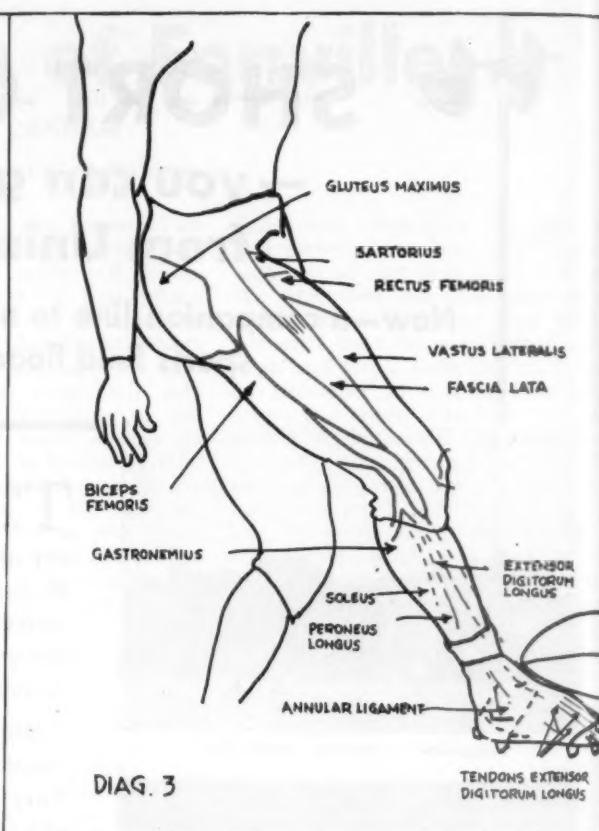
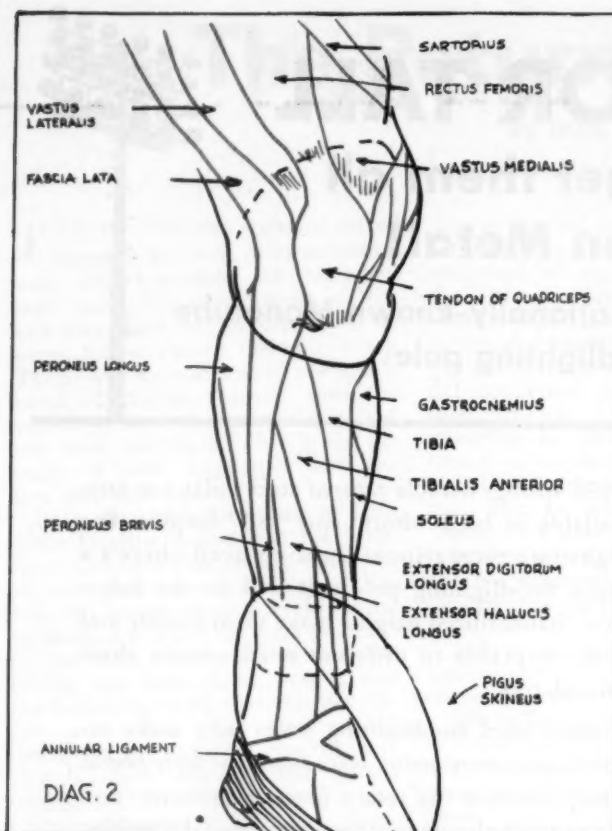
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A Muscular Analysis of the Punt

(Continued from page 22)

quadriceps femoris is of prime importance to the kicker because this is the muscle which gives added power in propelling the ball a greater distance. At the moment of impact of the foot and ball, there is a sudden voluntary contraction of the quadriceps femoris by the punter which creates a snap in the kick. The degree of snap varies with the ability of the individual. The greater the snap or contraction, the more power is added to the kick. Also, if the kicking leg is to be raised as high and with as much force as possible, the pelvis must be flexed on the trunk. This cannot be done because of the iliofemoral ligament, unless the supporting leg is flexed at the knee; when this knee is flexed a little, the abdominal muscles can lift the front of the pelvis. In this case, the weight is thrown so far backward that the arms must be raised up and forward

to maintain balance.

Locking the Ankle

The third and final grouping are those muscles involved in plantar flexion and inversion of the foot. The ball is placed across the instep at the moment of impact. This instep is where the tibia is attached by ligaments to the tarsal bones of the foot. The most superficial connective ligament which surrounds the ankle is the annular ligament.

The foot is straightened and the toes are pointed inward and downward to furnish a flat surface for the pigskin. The muscles involved in plantar flexion are: 1) gastrocnemius, 2) soleus, 3) tibialis posterior, 4) peroneus longus and 5) peroneus brevis.

It is the contraction of these muscles which straighten the foot in plantar flexion. The tibialis anterior and posterior are responsible for the inversion of the foot.

It should be strongly impressed upon the kicker that it is important to limber up those big leg muscles prior to kicking because of the abrupt strain placed upon them in punting. A stretching of these muscles should be encouraged for best results, and

for proper functioning of these muscle groups with no bad effects.

In punting and in advancing the ball in soccer, the kick is given with the inside of the foot just in front of the instep, the whole limb being rotated outward in the hip.

Fatigue

In regard to fatigue localization, we find it occurs mostly in the quadriceps group (front of thigh). The rectus femoris, the most important member of this muscle group, is considerably affected by sudden upward kicking movements.

Summary

The strongest kick of the ball that one can make requires the strong action of extensors of both knees, with the supporting knee slightly bent; strong flexion of the hip on the kicking side; strong work of the ankle extensors and hip abductors and extensors of the supporting side; the moderate action of the abdominal muscles and the arm-raising group. It should be remembered that all these movements are part of one of the most finely co-ordinated actions the human body can make.

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Why Is Tennis An Orphaned Sport?

By HARRY C. LEIGHTON

Tennis Coach, Senn High School, Chicago

THE other day one of my students of four or five years ago came in to see me. When he graduates from a physical education course in June, he will go out looking for a job just as I did many years ago. Like most of the youths of today he is full of enthusiasm and confidence, but his whole interest is centered around his two favorite sports — basketball and baseball. When I asked him about his ability to teach gymnastics, fencing, golf, and tennis, he admitted that he had had only a smattering of these activities because they had been taught mostly by other students. As he put it, "Our school couldn't afford a specialist in each of these activities, and surely you can't expect one man to know and be able to teach all of them".

"Son," I replied, "wherever you begin teaching, the administrators will expect you to be able to teach all of them plus any or all of the major sports".

"You know, Cap," he said, "I could have had most of those activities right here in high school if I hadn't been so crazy about basketball and baseball. A few more years and I won't be able to play basketball any more and then what will I turn to for exercise? I am sorry I didn't take up tennis and golf here at school. Then at least I could have fun for a long time to come".

Being interested in tennis as a good carry-over sport, I have asked myself many times over, "Why isn't tennis taught in more of our schools today?" Here are some of the major handicaps taken from my own experience and from that of teachers of tennis in colleges, high schools, playgrounds and tennis clubs.

Let's look at the very top of the tennis structure. Here we have the United States Lawn Tennis Association, the governing body of tennis. To them we owe a debt of gratitude for keeping tennis on the high and sane level that it has enjoyed ever since the game was first introduced many years ago. Their main theme has been and always will be "Never leave the court without at least a tie in sportsmanship".

Nevertheless, these men who have devoted their time and money to the promotion of tennis have, it seems to me, allowed tradition to get ahead

of progress. Some of them are still living in the days of yester year when they were stars on the courts. At that time a boy didn't consider playing tennis until he was fourteen or fifteen. They thought the best time to learn the game was at that age and, therefore, they set the age limit for boys competition at fifteen and the age limit for juniors at eighteen.

Let us take the age of fifteen. It is really the awkward age when a boy is in the most difficult period of life. He is awkward, self-conscious, lacking in stability, and always lazy because he is spending much of his strength in growth. His co-ordination is poor, his timing is bad and as a result, when he does make a mistake he thinks the world is focusing its attention on him. He may be six feet two in height, or he may be a runt; if he is big and strong, he has power that lacks control. If he is a runt, he has to rely on control and the ability to retrieve.

What is the answer? *Start teaching tennis skills and fundamentals in the grade schools.* The children in the fourth and fifth grades are ready to learn the skills. At that age they learn fast. They can develop co-ordination, timing, good muscles, fine skills that will carry them through the awkward stage without too much confusion.

The United States Lawn Tennis Association could do much toward starting the kids early in life to learn the skills which will make them want to go on with tennis. They could do much to curb the uneven matching of players in the fifteen-year-old group. For example, the last sixteen players in the Nationals at Kalamazoo last year were practically all around six feet in height. Basketball has its problems with the tall player. Will tennis follow suit? Will size

be the main factor in determining the final outcome of a match?

By lowering the age bracket from 15 to 14, we could form another age grouping and give the average kid a chance. This would mean three groups instead of two. The first group under 14 would be made up of boys of about the same size. By matching boys of the same size we would not find boys resorting to a "dink" game in order to win a match. A boy could match his power and control with boys of his own size. He would not have to resort to an unorthodox method to win. His net game would improve because he would not be hitting against a power player. He could play an offensive rather than a defensive game.

The next group, 14 to 16, would not be playing as good tennis as the others, for here we would find the awkward player. No overgrown player likes to play against, much less lose, to the "runt" who does nothing but lob whenever he is forced to play.

The final group, 16 to 18, would be the cream of the crop. The weeding out process would leave only the best players to compete for the Junior crown. All matches would be championship matches for play would be on a more even basis.

Limiting the entry to 32 in each group would not overload the facilities at the National Boys and Junior Tournament at Kalamazoo. By this regulation, play could be completed without all concerned working overtime in case of interruption of play due to rain.

Besides these obstacles in the set-up of the United States Lawn Tennis Association, another handicap is the lack of the proper kind of instruction in our teacher-training schools. Too many of the tennis teachers in our physical education departments, I am sorry to say, are attempting to teach the students to *play the game* and are forgetting to teach *methods of instruction*. Unless the student has a background in tennis, it is just about impossible to learn the game well enough to become a good player. Therefore, the emphasis should be placed on teaching methods, especially how to teach the fundamentals and how to handle large groups at one time. Too much stress is being

(Continued on page 48)

HARRY C. LEIGHTON is well known among tennis circles. He served as consultant for the Athletic Institute's slidefilm and books on tennis, has served in city-wide tennis clinics in Chicago, and is professional at the River Forest Tennis Club.

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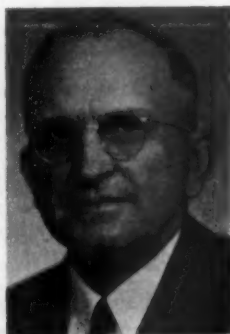
Special Events: 100-Yard Dash, 120-Yard High Hurdle, Javelin Throw, Broad Jump, Shot Put, High Jump, Two-Mile Relay and 220-Yard Relay. Relays: 440-Yard Relay, 880-Yard Relay, Sprint Medley Relay and Distance Medley Relay. (High School Competition to be held on April 29.)

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tance Relay and Shuttle High Hurdle

College Section
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mile Relay and Distance Medley

High School Section
100-Yard Relay, 120-Yard High Hurdles,
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ing Bill Mack of Michigan State in
a terrific finish to last year's Drake
Relays distance medley relay.



When To Coach Blocking and Tackling

By BURL V. BERRY

Freshman Football Coach, Grinnell College

It has long been a problem for football coaches to teach blocking and tackling without the danger of early season injuries. Every football coach has given this a good deal of thought and perhaps he thinks he has the best training program for early season, or at least, the best one for his particular style of play. The method that I believe will lessen the danger of injury from early season blocking and tackling and still teach the other fundamentals effectively, may at first seem to be somewhat unreasonable but I have found it to be most successful.

One summer all of our football pads were sent away for storage and repair and in September we were forced to start practice without them. Since there were only three weeks to practice before the first game, we did the only thing that could be done. We dressed the squad in T-shirts, shorts, supporters, socks and football shoes and went to work, spending the first week running, practicing stance, charging, passing, receiving, kicking and working on pass defense.

At the end of this week the pads were still not available so we readjusted our plans and continued. We reviewed all that had been taught the first week and set up our formations and signal system. Because we were using the same system as the year before, this was taught very rapidly but since there had been no blocking or tackling, none of the boys were discouraged and all felt that they had a good chance to make the team. As a result, they paid very close attention and even the lightest boys were given coaching. The time spent with these lighter boys proved to be of much value the following year. Since we had very little idea which boys could and would block and tackle the best, we had to be very careful to see that each boy learned every point in the entire system.

There was only one division made and that one was not exact. In general the boys who could kick, throw and run best were designated as backs and all of the others were linemen. We had no way of knowing who would start the first game, so all the backs as well as the linemen were told that if they hoped to play much in the first few games, it would

be necessary for them to understand the system so well that they could play any position.

By Wednesday of the second week the pads still had not been delivered, so we started giving plays. The boys were taught twelve running plays, four pass patterns with a number of options on each as well as place kick and punt plays. Then we ran the plays passively against a dummy defense for hours. We coached in detail every bit of offensive play that we knew, with special emphasis on *why* to block, *where* to block and *when* to block, but said nothing about *how* to block.

On Monday of the third week we were surprised to find that every boy knew the plays so well that he could do a fair or better job in every line position and the backs understood the ways of our system so well that practically anyone could have been a quarterback. What was more important, there had not been a single injury and the squad appeared to be in good shape. Surely their feet and legs were in good shape, their hands and arms were stronger and we reasoned that a player did not have to be calloused to his pads if the pads fit correctly.

On Monday and Tuesday before the first game which was on Friday, we concentrated on kick-offs, defense on punts and against the running attack, spending only a few minutes to review pass defense. On Wednesday the pads came. The boys dressed in full uniform for the first time and were eager to learn *how* to block and tackle — they were ready, both psychologically and physically. This was their first bit of contact work. They scrimmaged while we coached each player just *how* to block on each

play. This was easy to teach at this time since the players already understood *why* and knew *where* and *when* to block.

We won our first game, in fact we lost only one game in the schedule. To us, the season had been a success because there were no injuries except minor scratches and bumps, none of the players became contact shy and they demonstrated their enthusiasm by blocking and tackling with increasing abandon.

The next year the pads were available but were not used until four days before the first game. We followed practically the same coaching procedure as we had the year before. This team, being undefeated, was even more successful.

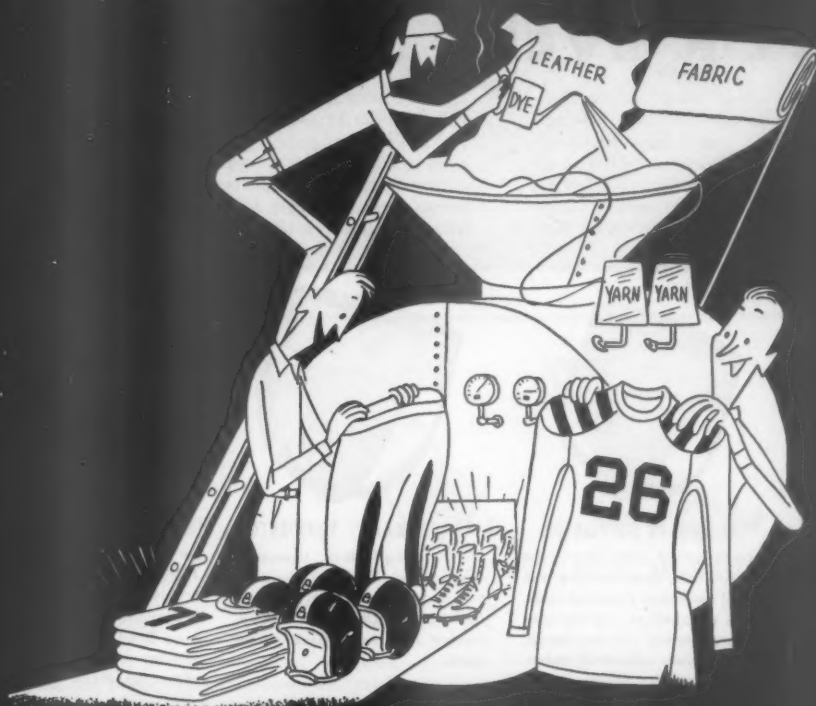
I believe (1) that blocking and tackling are the most important fundamentals in football, (2) that they can best be taught after the players understand the entire system and (3) that these fundamentals are 90 per cent desire and 10 per cent "know-how." It would be ridiculous to try to teach a boy *how* to build a wooden box before he understood *why* he should drive the nails, *where* he should drive them and *when* he should drive them. After the football player has these understandings he is ready mentally and emotionally to learn *how* to block. He is mentally ready because he understands why he is expected to block and tackle. He sees what they contribute to the play. He is emotionally ready because he will have lost his fear of the contact in blocking and tackling due to the length of time in which he has become psychologically conditioned. Early season contact work causes more injuries than contact after the athletes have conditioned their arms and legs by running, charging, falling on the ball, etc.

Another advantage in coaching contact fundamentals later is that it aids in retaining the pleasure of the game. Football is fun but the fun disappears for any boy who is forced to put on heavy pads, pants and shirts and is driven into contact work when he does not understand many of the important things about the game. This is even more discouraging if the temperature is around 90 degrees in the shade.

(Continued on page 62)

BURL V. BERRY graduated from Iowa State Teachers College where he was voted the most valuable football player in his senior year. He has coached in high schools and during the war served as a physical education instructor at Iowa State College. Mr. Berry is also freshman football coach at Grinnell.

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Reg. U. S. Pat. Off.

BIKE TRAINERS TAPES

Stick fast, stay on, minimize tape-irritation allergy. Elastic mass permits skin movement, prevents excess tape "creep." Maximum adhesion at normal skin temperature, maximum resistance to climatic conditions, age and deterioration. Handles easily. **BIKE FORMULA 87** Trainers Tape... highest quality tape obtainable, extra strong, extra protective. **BIKE ZINC OXIDE** Trainers Tape... slightly lighter back cloth, more flexible, more economical.





BIKE NO. 53 CUP SUPPORTER

One of most comfortable cup supporters ever! Specially constructed pouch, made from inside out, forms tube with no rough edges to chafe or irritate. Unbreakable snaps hold pouch to 3" waistband, make it easy to insert cup and cushion.



BIKE NO. 54 CUP SUPPORTER

Special pouch formed like a tube, shields wearer against chafing or irritation. Unbreakable snaps fasten pouch to specially constructed 6" waistband—easy to insert cup and cushion. One of the most comfortable cup supporters available.



BIKE NO. 48 RUBBER CUSHION

A porous, springy rubber cushion that fits snugly over the edges of the cup but is removable for sanitary purposes. Will not chafe, affords maximum comfort and protection. Fits all standard cups.



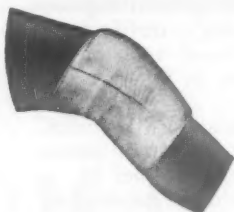
BIKE NO. 49 CUP

No. 49 Cup is a new BIKE product, molded from light, strong magnesium. Comfortably lightweight, provides greatest possible protection. BIKE NO. 50 CUP is new, improved made of tough, feather-weight Tenite, offers complete safety and comfort.



BIKE NO. 65 KNEE PAD

Absorbs shocks from blows and falls to knees and elbows. A 1/2" thick sponge rubber pad is enclosed between layers of cotton webbing. Two-way stretch, flexes with knee and elbow movement. Tapered to follow natural contours. Four sizes—S, M, L, ExL.



BIKE NO. 65-C KNEE PAD

Your choice of 5 colors: Scarlet, Gold, Kelly Green, Royal Blue, Black. Pad same construction as No. 65. Washable, pre-shrunk, piece-dyed, colors won't run. Wonderful protection and a smart way to match uniforms and add more color to game.



BIKE NO. 88 ANKLET

An unusually soft and pliable knitted garment made without seams or welts. The seamless construction and specially finished edges allow comfortable wear for the user.



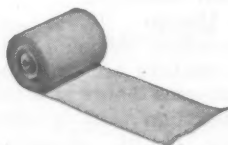
BIKE NO. 99 KNEE CAP

The No. 99 is knitted without seams, thus eliminating separation of rubber and fabric and increasing its ability to withstand repeated laundering. Specially finished top and bottom insures extra long wear.



TENSOR* ELASTIC BANDAGE

Ideal for sprains, torn muscles, dislocations. Woven with live rubber thread, TENSOR exerts even, controlled pressure; is easy to apply. Available in 2" to 6" widths, 5 1/2 yards long when stretched.



BIKE CHARLEY HORSE WRAP

A 3" wide strip of elastic webbing cut 8 feet long (unstretched). Covered natural rubber, fine cotton yarn. Very effective treatment when applied over a heat pack or when heavy, sturdy support is needed.



BIKE ANKLE AND HAND WRAP

No. 44 has selvage edges, non-ravel ends! Closely woven, herringbone weave cotton 2 1/4" wide by 2 yds. long. Finest material withstands repeated laundings. No. 45 with tails on one end for tying. No. 46...36 yards long. No. 47...72 yards long.



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Teaching Requirements

(Continued from page 18)

composition, literature, social studies, mathematics, natural science, and foreign languages, and two years of college work in general physical education, and one course in health and hygiene. In addition, a minimum of 18 hours is required in professional education. For a certificate in health and physical education, all of the above listed requirements must be met and, in addition, the following: Health and physical education, 24 hours, including health, physiology, physical activities, and recreation.

Montana

Teachers instructing physical education classes a majority of their time must hold a major in the field. If less than half of their classes are in physical education, they must hold a minor in the field. In schools with up to 100 enrollment, if physical education is a part of his regular assignment, the teacher must hold a minor in physical education. Health is taught by the biology, the home economics, or the physical education teacher. There are no requirements other than that the teacher must hold a State certificate.

Athletic coaches must have a certificate in their respective teaching fields.

Nebraska

To teach in the secondary schools, a person must complete a 4-year college teacher-training course and hold a baccalaureate degree with a minimum of 18 semester hours of college credit in education, at least three of which must be in supervised or practice teaching and with specialization in the field of physical education.

Athletic coaches must complete four years of college teacher-training course of study, with specialization in physical education and coaching.

Nevada

Secondary school teachers are all required to hold the Regular Nevada High School Certificate.

"High School Certificate"—Graduates of the University of Nevada who have completed the courses prescribed by the School of Education will be granted high-school certificates valid for five years. This certificate may be granted to any applicant 18 years of age or older who holds a bachelor of arts or a bachelor of science degree from a standard college, normal school, or university, and who has had 18 semester hours' training in the field of professional education, including four semester hours of prac-

tice teaching.

New Hampshire

A candidate for certification as a secondary school teacher shall have completed a 4- or 5-year course in a standard institution; have 21 semester hours' credit in education courses, including six semester hours in supervised student teaching; and have had at least 18 semester hours' credit in one or more fields usually taught in secondary schools. A teacher of physical education shall have, in addition, six semester hours' credit in methods of teaching physical education in elementary and secondary schools.

Athletic coaches shall meet the minimum academic and professional requirements for a teacher.

New Jersey

In addition to the general requirements for a teacher's certificate a bachelor's degree based upon an accredited curriculum in a 4-year college.

Two teaching fields are required, one of which must contain 30 semester-hour credits and the other 18.

The teaching fields in health and physical education include:

Health education—health problems, hygiene, bacteriology, normal diagnosis, nutrition, home hygiene, safety education.

Physical education—coaching, development of personal skills, nature and function of play, organization and administration of physical education, principles of physical education.

Athletic coaches must be certified in physical education.

New Mexico

Secondary school physical education teachers are required to have ten semester hours as a minimum in the teaching field in addition to a degree. Health education requirements are the same.

New York

Athletic coaches are expected to qualify for a teaching certificate in the field of physical education.

The schedule used to appraise the 36-semester-hour program in physical education and hygiene follows: Applied anatomy with a range from 2 to 4 semester hours; physiology of exercise, 2 to 4; physical inspection, 2 to 4; first aid and safety education, 2 to 4; physical education of atypical children, 2 to 4; physical education tests and measurements, 2 to 4; administration, organization, and supervision (in physical education, recreation, and camping) 6 to 8; physical education skills and applied techniques, 14 to 16. The prerequisites are 18 semester hours in science, in-

cluding one course in each of the following fields: Anatomy, physiology, biology, and bacteriology.

North Carolina

Certification for health and for physical education is combined into one and includes both junior and senior high school teaching. Thirty semester hours is required for full-time teaching and the courses shall include: Human anatomy and physiology, six semester hours; principles, organization, administration, supervision of physical education and health education, 6 to 8; physical education skills and applied techniques, 6 to 8; individual corrective physical education, 2 to 4; health education, 4 to 7; and biology, six semester hours.

North Dakota

State requirements for certification of secondary health and physical education teachers include a degree and 16 semester hours of education. These 16 hours must include at least three semester hours in student teaching.

These requirements are the same for supervisors and athletic coaches.

In addition to meeting the requirements for a first-grade professional certificate, the teacher of physical education must have completed at least 15 semester hours in this subject.

Ohio

The minimum requirements for certification in health and physical education, valid for service in grades 7-12 inclusive, shall consist of the following pattern of training:

Group I. Principles, organization, and administration of physical education, including athletics and recreation—3 semester hours' credit.

Group II. Activities, skills, and methods of teaching rhythms, games of low organization, stunts, tumbling, apparatus, recreational group activities, and others—4 semester hours' credit.

Group III. Activities, skills, and methods of teaching athletic sports, including football, basketball, baseball, track, tennis, golf, swimming, soccer, speedball, volleyball, and others commonly used in secondary and college programs—4 semester hours' credit.

Group IV. Methods and materials in teaching health, including evaluation and selection of health material—3 semester hours' credit.

Group V. Health and hygiene, including personal health and living, community health, mental hygiene, social hygiene, foods, and nutrition, sanitation, disease control, health counseling, athletic injuries, and first aid—4 semester hours' credit.

Group VI. Human anatomy and



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physiology—6 semester hours' credit.

Total semester hours' credit—24.

Oklahoma

The physical education certificate authorizes the teaching of health and physical education and the coaching of athletics. Two types of certificates are issued—one for one year and one for life. The following courses in education, not more than six semester hours of which shall be completed during the first two years of the college course, require 15 hours for the one-year certificate and 21 hours for the life certificate: Activity or participation; Organization and administration; Individual gymnastics; First aid; Boy and girl leadership; Anatomy; Theory of activities (including theory of intramurals).

Other courses are required, making the total requirement of 90 semester hours for the one-year certificate and 124 semester hours for the life certificate. A bachelor of arts or a bachelor of science degree is the minimum for the life certificate.

Oregon

Any teacher who holds a regular secondary certificate may teach physical and or health education. For a regular special physical education certificate an applicant must meet the requirements for regular secondary certification and have 24 semester or 36 quarter hours in physical education or a major in the field. This certificate is not required in order to teach health or physical education.

There is no special certificate for teaching health as such. Supervisors are required to hold the regular secondary certificate. Athletic coaches must also hold a regular secondary certificate.

Pennsylvania

A certificate to teach health and physical education is valid for teaching in all grades above the sixth. A certificate to teach and supervise health and physical education is valid for any of the grades of the public schools.

A college certificate may be extended to include the teaching of health and physical education on the satisfactory completion of 30-semester hours of courses selected from an approved teacher-education curriculum in health and physical education. The courses should represent an approximately equal distribution among: Health education, one-third; physical education, one-third; and theory, organization, and administration courses, and student teaching in health and physical education classes, one-third.

No certificate is required for athletic coaches.

Rhode Island

Professional certificates in subjects such as physical education are granted to applicants who present satisfactory evidence of specialization in the subject as part of the academic requirement beyond graduation from high school, who have completed 400 clock hours of satisfactory study of the science of education, and 400 clock hours of practice teaching under direction of an approved critic teacher.

Athletic coaches must have a professional certificate.

South Carolina

To secure a teaching certificate, a candidate must meet minimum requirements in general education and professional education, as well as in the area of specialization.

South Dakota

"High School General" and "Special" certificates are issued upon completion of a 4-year college course, including approved education courses. The special certificate requires special training in one or more fields.

Athletic coaches must have the regular secondary certificate.

Tennessee

A permanent professional high-school certificate may be issued to a person who has: Graduated from a 4-year college or university approved by the State commissioner and the State board of education; completion of at least 27 quarter hours in education, as prescribed by the State commissioner and State board of education; and completion of not less than 21 quarter hours of credit in health and physical-education courses. The training shall be distributed as follows: Physical education nine quarter hours, including two quarter hours of conditioning exercises which are required, may be selected from stunts and tumbling, two; boxing, wrestling, and combat activities, 2; folk rhythms, 2; adult sports, 2; group games or athletic coaching, 3; restricted or individual activities, 2; tap rhythms, 2.

Tennessee requires a certificate for coaches.

Texas

Full-time teachers must have 24 semester hours of college credit in physical and health education. Part-time teachers must have 12 semester hours' training. (Two physical education classes per day constitute a sufficient teaching load to classify a person as a part-time teacher of physical education. If a teacher is coaching team sports, the equivalent of two classes per day, and not more than six semester hours of the twelve required for a part-time teacher may be in coaching sports). The permanent

high-school certificate requires a degree and 24 hours in education and a course in Texas and Federal Government.

Coaches who teach other academic subjects are considered part-time teachers and must have 12 semester hours' training.

Utah

In addition to the general requirements, physical education teachers are expected to have a composite major in physical education and health. A teacher may qualify for a general secondary certificate with a major of 30 quarter hours in physical education and qualify as a physical education teacher.

Vermont

Certificates for full-time teachers who have specialized in physical education shall be granted to those whose preparation has been in approved schools and the length of whose preparation compares to the minimum requirements for other regularly certified secondary teachers.

Virginia

There is no differentiation between health education and physical education teachers. They are classified as physical and health education teachers.

The holder of a "Collegiate Professional" or Collegiate Certificate" may be certified in physical and health education on presentation of evidence of a minimum of 12 semester hours of credit in the field. The holder of one of the afore-mentioned certificates must have two semester hours' credit in school and community hygiene, including the physical inspection of school children.

Athletic coaches are required to be bona fide faculty members.

Washington

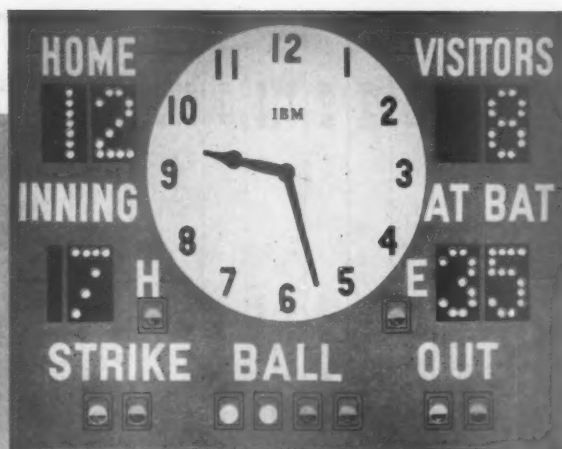
Physical education teachers and coaches are required to have the state certificate.

West Virginia

First-Class high-school certificates will be issued upon graduation and recommendation from a standard college and completion of 28 semester hours of specified general requirements, 20 semester hours of specified professional requirements, and 24 semester hours of required courses in physical education.

The required courses include: Anatomy, physiology, and kinesiology, 4; health education and hygiene, 4; principles, organization, and administration of health and physical education, 2; physical inspection and correction of remedial defects, 1; theory and practice of physical education, 13, in

(Continued on page 48)



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1950 STATE BASKETBALL TOURNAMENTS

The following coaches guided their teams to the state crown both last year and this year: Roy L. Byers, Colorado; Francis Dahm, Colorado; Ernest Neipp, Connecticut; Wilbur Montgomery, Idaho; Stanley Chagnon, Illinois; William Redmond, Maine; Robert Quiring, Michigan; Richard Snow, New Hampshire; Virgil Simmons, Washington.

These coaches' teams were runners-up in 1949 and won this year: Clair Bates, Arkansas; Joe Jenkins, Florida; W. H. Martin Jr., Georgia; Ray Eddy, Indiana; Ralph Carlisle, Kentucky; Richard Westcott, Maine; Emil Engelbreitson, Nebraska; Jim Rudd, New Mexico; A. J. Simeon, North Carolina; Amos Sexton, North Carolina; J. C. Ellington, North Carolina; Lee Beeson, Texas; Don Overly, Utah; Everett Brinkman, West Virginia.

	WINNER	COACH	RUNNER-UP	COACH	SCORE
ALABAMA	A—Union Hill AA—Eastley (Birmingham)	Delmar Bagwell C. E. McGinn	Fyfe McGinn	Sam Bailey Ray Dickard	50-45
ARIZONA	A—Mesa B—Coolidge	Edgar Ford David Roseboro	North Phoenix Nogales	William Mann Jim Concannon	51-40 47-44
ARKANSAS	A & Big 6—Van Buren A—Van Buren B—Valley Springs	Clair Bates Clair Bates Gordon Lokey	North Little Rock Leachville Bismark	Larry Hayes Elbridge McKee Wallis Holt	28-22 54-43 32-22
COLORADO	AA—Manual (Denver) A—Westminster B—Center C—Bonford	Roy L. Byers Paul Becker F. J. Witherspoon Francis Dahm	West (Denver) Ft. Morgan Lafayette Bennett	Gaston Smith Don Evans DeWitt Brennan John L. Lynn	48-43 28-26 48-35 48-32
CONNECTICUT	L—New Britain M—Stonington S—Tourelotte	Ernest Neipp M. Fabricant James P. Conly	Bridgeport Central Derham Ellsworth	E. J. Reilly John Maher Albert Loeffler	38-27 48-46 40-38
FLORIDA	A—Jesuit (Tampa) B—Seabreeze (Daytona Beach) C—Tavares	Paul Straub Joe Nelson Joe Jenkins	Jackson (Jacksonville) S. Broward (Hollywood) Macclenny	Phil Craig Morton L. Brown Mike Gaskick	55-48 55-53 22-18
GEORGIA	AA—Lanier (Macon) A—Summerville B—Irwinville C—Montezuma	Selby Buck Garland Finkholster W. C. Childs W. H. Martin, Jr.	Savannah Valdosta Ludowick Revis (Statesboro)	I. M. Shiver Wright Rosemore Bickley Thornton M. C. Estes	47-37 46-43 58-44 51-44
IDAHO	A—Nampa B—Orofino	J. A. Brown Wilbur Montgomery	Lewiston Genesee	Wes Lathan Garold Hammond	52-34 45-33
ILLINOIS	Mount Vernon	Stanley Chagnon	Danville	Arnold Ave	85-61
INDIANA	Madison	Ray Eddy	Lafayette	Marion Crowley	67-44
IOWA	Davenport	Paul Moon	Ankeny	Merit Parsons	67-28
KANSAS	AA—Salina A—Larned B—Downs	Earl Morrison Tom Bulkeley Keith O'Connor	Newton Olathe Lansing	John Ravenscroft Jean Bennett E. W. Johnmeyer	63-53 48-40 59-30
KENTUCKY	Lafayette (Lexington)	Ralph Carlisle	Clark (Winchester)	Letcher Norton	56-51
LOUISIANA	AA—Baton Rouge A—Baker B—Dulac Springs C—Florissant	Kennar Day C. G. Hornsby	St. Alloysius Frankston Lafayette Friendship	John Allobello C. B. Wheat	54-41 52-23 52-32 54-30
MAINE	L—Portland M—Milo S—Schenck	Henry Deetten Richard Westcott William Redmond	Millinocket Farmington West Paris	George Wentworth Ronald Carlson Clarence Reid	28-23 49-48 52-42
MASSACHUSETTS	A—Somerville B—Fairhaven C—Dunton Voc.	Sullivan Enattin O'Keefe	Attleboro Belmont Punchard	Tozier Wenner McKinney	32-34 64-43 46-38
MICHIGAN	A—Kalamazoo-Central B—Birmingham C—East Grand Rapids D—Brimley	Robert Quiring C. W. Hoeble John C. Hoeble Karl Parizer	Port Huron Grand Rapids (Godwin Heights) Saginaw (St. Peter & Paul) Fowler	Reed Laughlin James V. Smith Michael Lanorack Marion Piggott	64-50 42-37 64-48 37-30
MINNESOTA	Duluth Central	Ray Moran	Robbinsdale	Ed Kernan	48-40
MISSISSIPPI	A & AA—Boonville B & BB—Natchez	J. P. Bon L. P. Ballard	Fulton Jackson Station	Myers Wood Hortace Holmes	42-35 41-34
MISSOURI	A—Joplin B—Ozark	Russ Kaminsky Denny Burrows	Kirkwood Scrool of the Osage	Denver Miller Burt Henderson	33-40

MINNESOTA	D—Brimley	Duluth Central	Karl Parker	Ray Moran	Robbinsdale	Fowler	Ed Kervon	37—40
MISSISSIPPI	A—A—Bonneville B—B—Marietta	I. P. Box	Lyse Bullard	Fallen	Johnson Station	Waynes Wood	Horace Holmes	42—40
MISSOURI	A—Joplin B—Ozark	Russ Kaminsky	Denny Burrows	Kirkwood	School of the Osage	Denver Miller	Eul Henderson	33—20
MONTANA	A—Butte Central B—Fort Benton C—Nashua	Ed Roy	Fred Rooley	Helena	Whitehall	Lloyd Sker	Gene Bourdet	38—31
NEBRASKA	A—Lincoln (Northeast) B—Omaha (Holy Name) C—Madison Prep. D—Glenvil	E. A. Johnson	Emil Emerson	Scottsbluff	Wenden	Richard Thompson	Russ Bague	48—36
NEVADA	A—Reno B—Pahrump Valley	Bud Beasley	Lee Lamoreaux	White Pine (Elv)	Eureka	Angelo Collis	Grant Davis	43—33
NEW HAMPSHIRE	A—Portsmouth B—Kensett C—Ashland	James Phillips	Karl Siedenstucker	Central	Sommersworth	Bronstein	Dale O'Connell	65—49
NEW JERSEY	4—Emerson (Union City) 3—Regional (Springfield) 2—Ramsey 1—Roselle Park	John Eckert	Walter Hohn	Central (Newark)	Union Hill (Union City)	Sol Fleischman	George Fallings	70—67
NEW MEXICO	Tucumcari	Jim Rudd	Eunice	Central	North Arlington	Frank Focht	Wilbur Russell	40—38
NORTH CAROLINA	AA—High Point A—Kinston B—Camp Lejeune	A. J. Simson	Amos Sexton	Durham	Hanes	Paul Sikes	John Rackley	48—46
NORTH DAKOTA	A—Minot B—Minot Model High C—Columbus	Art Horde	Frank Good	Sacred Heart (Fargo)	Kennare	Sid Cichy	Bud Hannan	37—25
OKLAHOMA	A—Glasen B—Pawnee C—Addington	Carroll Smoler	LeRoy Matthews	Okmulgee	Bowlage	Leland Milroy	E. F. Brocha	42—28
OREGON	A—Salem B—Rogue River	Harold Houck	Millard Webb	Rocky	Granite Pass	Ed Miller	Hank Anderson	48—41
SOUTH CAROLINA	A—Lancaster B—Piedmont C—McClanville	Tom McConnell	J. H. Nesbitt	Darlington	William Moultrie	Bill Cain	Francis Waldrop	34—28
SOUTH DAKOTA	A—Mitchell B—Emery	Kans Overstiel	Wayne Stone	Calhoun Falls	Waukegan	L. E. Crowley	Ed Obenauer	31—28
TENNESSEE	Happy Valley	A. L. Treadway	Knoxville	Granite	Payson	Steve Adkins	Ed Obenauer	51—42
TEXAS	City—Milby (Houston) AA—Corpus Christi A—Canyon B—Graver	Lee Besson	Henry D. Crawford	Crozier (Dallas)	Vernon	James Adkison	Bob Percival	34—26
UTAH	A—South B—American Fork	Rory Peterson	Don Overly	Walden	South San Antonio	James Heiser	James Calhoun	40—39
VIRGINIA	I—Granby II—Clatswood III—Garden	Donald Griffin	Howard Deel	Newport News	Graham	Julius Conn	Lawrence Bradley	40—34
WASHINGTON	A—South Kitsap B—Kalama	Ty Stephens	Virge Simmons	Lincoln (Seattle)	Valley	Bill Mallan	Ed Tenetki	48—25
WEST VIRGINIA	A—Wheeling B—Concord (Athens)	Everett Brinkmann	Joe Vachon	Elkins	Kernit	Frank Wimer	Virgil Hoke	43—34
WISCONSIN	St. Croix Falls	Don Snyder	Eun Claire	Frank Wimer	Virgil Hoke	John Novak	Chester Christiansen	53—50
WYOMING	A—Rock Springs B—Byron	Mack Peyton	W. A. Mowrer	John Novak	Chester Christiansen	38—23	31—27	58—35

Tournaments are not held in California, Delaware, New York and Maryland. No results received from Ohio, Pennsylvania, Rhode Island or Vermont.

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NEW BOOKS

Use Your Head in Tennis, by Bob Harman with Keith Munroe. Published by Thomas Y. Crowell Company. New York. Two hundred and twelve pages. \$2.95

This book does not deal primarily with the fundamentals of tennis technique, although they are not ignored, but rather with the strategy of the game. It strives to improve the average player's game, not by teaching him to serve and drive like a ranking player, but by teaching him to capitalize on his game to the fullest by using his head.

All phases of strategy are considered: in serving, returning service, driving, volleying, lobbing, etc. Fine points of play that may have never occurred to many players are discussed here. In addition, the most common faults of the non-ranking player are given excellent attention. Such weaknesses as jerking in the swing, hitting too hard, flicking the wrist, etc.

This is a valuable addition to the literature on the game.

The Greatest Victory and Other Baseball Stories, by Frank O'Rourke. Published by A. S. Barnes and Company. New York. Two hundred and six pages. \$2.50

This is a book of twelve baseball stories by the author of the sports novels *Flashing Spikes* and *The Team*. Four of these stories first appeared in the *Saturday Evening Post*. All the rest in the book are printed for the first time.

Baseball Instructor's Guide. Consultants: Otto H. Vogel and Dick Siebert. Published by the Athletic Institute. Size 8½" x 11". Eighty-six pages. Three hundred and fourteen illustrations. \$1.75

This is one of the Athletic Institute's new series of instructor's guides to the teaching of sports fundamentals. Each guide is developed by noted coaches and instructors and covers a complete course of instruction that can be followed in the teaching or coaching of fundamentals. Each outlines suggestions on how to organize a class. Every new learning situation is progressively presented both in text and in action photographs.

Tennis Instructor's Guide. Consultants: Harry "Cap" Leighton. Published by the Athletic Institute. Sixty-two pages. \$1.25

Same series as above. This has 251 illustrations.

Golf Instructor's Guide. Consultants: Bob McDonald and Les Bolstad. Published by the Athletic Institute. Sixty pages. \$1.00

Same series as baseball and tennis. This has 199 illustrations.

Archery Instructor's Guide. Consultant: Eloise Jaeger. Published by the Athletic Institute. Sixty-two pages. \$1.00

Same as those above. This has 183 illustrations.

Individual and Dual Stunts, by Hugo Fischer and Dean R. Shawbold. Published by Burgess Publishing Company, Minneapolis. One hundred sixty pages. \$2.50

This "book" is actually a group of loose 4¼" x 5" cards, each of which contains two or three pictures illustrating some individual or dual stunt. The format is therefore such that several stunts may be pinned on a bulletin board for class study or passed around among a class for individual perusal.

The authors have selected a series of representative stunts adaptable to a broad range of abilities and interests. Most of the stunts may be performed in limited areas and require no equipment.

The individual stunts fall into many groupings a few of which are: balance; jumps; walks; vaults; inverted stands; etc. The dual stunts are balance; lifts; combatives; whirls, jumps and balances, etc.

Swimming, by John A. Torney, Jr. Published by McGraw-Hill Book Company, Inc., New York. Three hundred fifteen pages. \$3.50.

This book is not only a guide to teaching swimming skills but a complete text which discusses the administration of a swimming program. Material is presented for courses dealing with swimming techniques, teaching methods, program administration, life-saving and team activities, and safety programs for school and community.

There are also chapters devoted to the varsity program, the intramural program, the administration of competition and to games, stunts and relays.

Illustrated Game Manual, by Frank H. Geri. Published by Ernie Rose, 215 Seneca Street, Seattle, Washington. One hundred six pages. School price; \$3.50.

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plained in this book are nearly all of the playground type except a few swimming games. Over two hundred games are described. These include tag games, circle games, goal games, relay games, races, baseball-type games, net games, etc.

The rules and regulations for the games have been condensed and organized so that they can be easily understood. The games have been classified according to an age level, but many games have been found to be workable on all levels.

Skiing—How To Teach and Organize It, by Ruth L. Elvedt. Published by the Burgess Publishing Company, Minneapolis. Thirty-eight pages. \$1.00.

The author's partial reason for writing this booklet was her belief that a good program of ski instruction can be conducted indoors and on grass as a preliminary to actual skiing. Part I of this booklet is therefore devoted to the pre-season program.

Part II is designed to help the teacher or club leader plan the content and method for the outdoor part of the ski program. This booklet does not cover the technique of skiing but rather what should be included in a course of instruction in skiing.

Center Court, by Helen Hull Jacobs. Published by A. S. Barnes and Company, New York. Two hundred thirty-nine pages. \$2.50.

This is a sports novel about a top-ranking woman tennis player written by the former national singles champion. The book brings us all the color, suspense, and excitement

of center-court matches with the championship at stake. At the same time we get an intimate and absorbing picture of what it takes to develop championship caliber both in mind and body, the rigorous training and preparation which prepare one for tournament play.

Teaching Requirements

(Continued from page 42)

the following groups of activities: team sports, recreational activities, school and community activities and rhythms.

Wisconsin

Physical education teachers in secondary schools are required to have 20 hours in physical education (\$0 for a major) from a college approved by the State department of public instruction. The courses are determined by the college.

These is no certification in health education and no requirements for athletic coaches.

Wyoming

Teaching certificates for high school are issued to applicants who have graduated from a standard college with 24 quarter hours of prescribed professional training and academic training—a minimum of 22½ quarter hours of college work chosen from training fields in which the candidate wishes to become certified. Deduction in certain fields, including physical education, is allowed to the extent of three quarter hours for each unit earned but not to exceed nine quarter hours in any one field.

Why Is Tennis An Orphaned Sport?

(Continued from page 32)

placed on theory and not enough time is given to practice.

Also, not many colleges have facilities for tennis. They all have large gymnasiums but it is almost impossible to squeeze enough time in for tennis. Many times the classes are too large and to top it off, two and sometimes three other classes are going on at the same time on the same floor. The resultant confusion makes it impossible to do effective teaching.

People who criticize should be prepared to offer constructive suggestions. Therefore, I will attempt to list the absolute minimum requirements we should expect from our students who may have to teach tennis:

1. To be able to demonstrate the principles of:

- A. The Pre-tests. (To determine the level of the class).
- B. The Forehand drive. (With proper footwork).
- C. The Backhand drive. (With proper footwork).
- D. The Beginner's Service. (With proper stance).
- E. The Advanced Service. (With proper stance).
- F. The Volley and Half-Volley. (With footwork).
- G. The Overhead Smash. (With footwork).

Even though one is not able to demonstrate properly all of these strokes, he must know the principles of the stroke so as to be able to correct mistakes.

2. To know the general rules of tennis.

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recognize and depend
upon this mark of quality

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Hinged Knee Cap
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3. To know as many practice formations as possible so that each student will have something definite to work on each day.

I cannot emphasize the next point too much. *All training and practice can and should be done indoors where the instructor has control of the class.* Once the students get on the courts, the teacher loses control of the class and consequently group instruction outdoors should be kept at a minimum. Soon individual differences begin to show up. Some advance faster than others so instruction becomes more individual. An example of this principle is to be found in the fine group instruction in golf that is being given right here in the Chicago Park District. Here you will find pupils of all ages learning to play before they go on a golf course. They spend many hours on club swinging before they hit a ball. This same idea, it seems to me, should be the essence of our instruction in tennis.

A very small percentage of our schools teach tennis because of the following: lack of equipment and available courts, few qualified teachers or coaches of tennis, and lack of vision on the part of the coach and the administrators. In most schools

the physical education teacher has all he can do to handle the *major* sports. He may never have had any tennis instruction himself and therefore is not interested. The easy way out is to call for tryouts for the tennis team, run a tournament, and pick the best players for the team. In some cases he may have an academic teacher to help coach the squad. Often he, too, has had no training in tennis instruction, and the players know more tennis than he does, so he appoints one of the better players as captain to take charge of the team.

The administrator, that is, the principal or the athletic director, must come in for his share of criticism. He has the authority to reduce the size of the class for tennis and golf. He has the authority to arrange time for tennis and golf instruction. A regular class during school time should be established for the *teaching* of these sports. The administrator has the authority to hire an academic teacher who has the necessary qualifications to teach tennis or golf and to give him time for one or two classes during the day. It can be done IF we are interested and feel that tennis and golf have a place in our educational system.

Tennis is such an easy game to learn that beginners enjoy it immediately, even without the benefit of good instruction. Usually this enjoyment is short-lived, however. Real, long-lasting fun comes with increasing skill. Without it the beginner will probably tire of the game in a short time, but with the progressive development of a few fundamental skills, the game offers a life-time of pleasure.

Program for Tennis

(Continued from page 14)

a lower level to a higher level only after he has proven his ability to perform at the lower level.

The Service

There are more variations in the production of the service stroke than possible in any one of the other strokes, many of which have excellent results. However, for the beginner, the service should be looked at merely as a means of putting the ball in play. When that has been mastered, the more difficult spins and variations of speed can be studied.

The simple, half-swing, slightly top-

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ped, slightly sliced type of service should be learned first.

1. The Grip.

Assume the same grip as is used in the forehand ground strokes, the Eastern type grip.

2. The Stance.

Stand sideways to the net. Then point the feet at the right net post, keeping them comfortably spread.

3. Point of Contact.

The ball is contacted at the height of one's reach directly over the left foot.

4. The Toss.

The ball is tossed upward with the left hand to a spot directly over the right foot. The left arm is dropped slightly from the waiting position, then moved upward, with the elbow being kept straight, and the ball is released as the left hand passes in front of the face. It should be tossed just slightly higher than one is able to reach with the racket. The left hand should follow the ball upward until the left arm is fully extended.

5. The Swing.

In starting the backswing, stand as described above and extend the racket toward the net, holding the head of the racket at about face level. Hold the ball in the left hand and rest

the hand lightly against the racket-handle.

The short swing serve should be learned first. Swing the racket head back over the right shoulder and let it fall behind the back, keeping the elbow at shoulder height. Pause momentarily, then toss the ball as described in the preceding paragraph.

As the ball reaches its maximum height, whip the racket upward and forward as far as can be reached comfortably. "Break" the wrist at the top of the swing so that the racket whips forward and leads the arm to the finish position, which is forward of the body. Shift the weight from the rear foot to the front foot during the course of the stroke.

One of the simplest of the many ideas in reference to hitting the ball is that suggested by Cap Leighton in his Athletic Institute "Beginning Tennis" series. He suggests that the server imagine that there is a clock face on the ball and that he strike the ball a glancing blow, with the racket meeting the ball at the 2 o'clock position on the imaginary clock face.

The short swing serve should be practiced until one can hit the ball into the service court with a fair degree of regularity, remembering that

it is used principally to put the ball in play. When one has learned to put the ball in play with the simple half-swing serve, one should begin to learn the full swing.

The full swing service is begun just as is the half-swing service, holding the racket at face level, extended toward the net, with the left hand resting against the handle of the racket.

Swing the racket down and back past the right knee, away from the net, and up until the elbow is about shoulder high and the racket is pointing away from the net. From this position, and without pausing, bring the arm forward in a throwing motion, dropping the racket behind the head in a small looping swing, then whipping it upward and forward as far as can be reached comfortably. "Break" the wrist at the top of the swing so that the racket whips forward and leads the arm to the finish position, which is forward of the body directly in front of the shoe tops. Shift the weight from the rear foot to the front foot during the course of the stroke.

The left arm moves upward to toss the ball as the right arm begins to move the racket upward just after it has passed the right knee.

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The racket should strike the ball a glancing blow at the 2 o'clock position on the face of the imaginary clock just as the ball starts to drop. This will impart a small amount of sidespin and topspin to the ball, causing it to curve and drop slightly as it crosses the net.

Don't try to "kill" the serves during the learning stage. Merely strive to get the ball into the service court with a medium amount of speed.

When the elements of the forehand, backhand, and the elementary serve have been mastered, one will have a very formidable baseline game. Such a baseline game is so effective that many locally ranking players use little else. It is a great mistake, however, to cease one's development after achieving this steady baseline game. Once the very necessary foundation of good form and steadiness have been mastered, angled shots, shots down the line, forcing shots, and a net game should be learned.

Making Athletics Popular

(Continued from page 15)

unnecessary to continue the chart system more than two weeks at the start of the season in order to get an ac-

curate line on candidates.

Points For Class Competition

In connection with this plan, the coach might divide his squad into three classes: A, B and C, with the veterans and known quantities in class A and the other divisions serving much as the jay-vees in other sports. If the division idea is adopted, a point system may be worked out whereby a player receives five points for a victory over a man in his own group, fifteen points for victory over a man in the group above him, and twenty-five points for victory over a man two groups ahead of him.

Another plan for handling the daily play of squad members, particularly in tennis and squash, may be adopted whereby a B man winning five matches from players in class A moves into that class, and a C man likewise advances to class B. Here again some sort of point system may also be included, the play advancing either through five victories over players in the class above or through a certain number of points gained by winning from members of his own group.

The variations on this sort of competition are numerous, and the coach can always devise something of spec-

ial appeal for a given group. In all cases, however, the primary object should be to add interest, variety, and incentive to what might otherwise become daily routine. I am convinced that the adoption of this system will pay dividends to both the individual player and to the officials through any recreational period.

The Baseball Trainer

(Continued from page 6)

trainer. One end of the table should be on a hinged joint about twenty-four inches from the end. The idea of this is to enable the trainer to raise the end of the table and thus facilitate such things as ankle strapping or to enable the player to relax the muscles of his legs and back for massage purposes. The table should be padded with blankets or some similar material to a thickness of approximately three-quarters of an inch, covered with a rubber sheeting. A small pillow should be available and this should also be covered with rubber sheeting. The table should be cleansed by an application of alcohol after each player has been on it, if the players go on the table nude. Another good practice is for them to lie

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on their own towels, also for purposes of sanitation. The trainer should see that the training room supplies and facilities are in an orderly condition and kept clean at all times.

No one should come into the training room unless he needs some treatment and then only one person at a time should be allowed in the room. The rest should wait their turn outside. In any case, except in an emergency, the player should take his shower before treatment by the trainer.

The training room should have an infra-red lamp, an ultra-violet lamp, a whirlpool bath, a short-wave diathermy generating machine and perhaps a mercury vapor or some other type of baking apparatus. There should also be tubs and buckets for soaks of different types.

The trainer should also have a small kit, comparable to a doctor's bag, for use on the playing field and also in his hotel room for use on the road, if the team travels.

If the team starts the season in time the trainer should condition his men gradually and he will save himself a great deal of trouble later on. The pitchers are the toughest problem as far as conditioning is concerned. Of all the players they are the most susceptible to injuries severe enough to cut short their career and render them useless to the team. I am referring in particular to arm injuries that the hurlers are apt to incur.

The pitchers must do a lot of running as this is the best single exercise for general conditioning. At the same time they must throw easily for a couple of weeks at least. Before throwing, the trainer should "stretch" the pitcher's arm. The idea is gradually to stretch the muscles, tendons, ligaments, nerves, blood vessels, etc. of the joints of the throwing arm to capacity and in this manner to prevent a pulled or torn muscle ligament or other tissue due to the pitcher throwing too hard before he is properly warmed up or ready for it. This stretching is an art, a highly-skilled technique and cannot be learned from a book. One must observe and be taught the process personally and considerable practice under supervision is advisable before taking the risk and responsibility of working on a pitcher's arm. The same is true of massage. Being an art, some people never develop much skill or ability at either "stretching" or massaging, although many claim to be experts in these fields.

The players should soak their feet in a brine solution to prevent blister-

ing and to toughen the skin of the feet, particularly in early season and when breaking in new shoes. Tincture of benzoin is a fine compound to help the skin-toughening process. Foot powder should also be used freely.

Although not as necessary as in football, due to the nature of the activities involved, the baseball trainer should be well-versed in strapping and bandaging sprains and strains. He should also know the uses and application of the ace bandage, ankle wraps, and other protective bandaging devices.

The "strawberry," which is a more or less serious abrasion caused by sliding and usually confined to the area of the thighs and buttocks, is a very common baseball injury. The procedure is to wash it with tincture of green soap in the shower, paint with tincture of methiolate and dress with a "donut". The dressing should be waterproof as the injury will "weep" and soil the clothes besides being very painful on contact. The dressing may

DICK COHEN graduated from New York University and received an MA in Health Education there. He participated in varsity football, wrestling and track at N.Y.U. and also played pro football. He is a licensed trainer of professional boxers in New York state as well as a licensed masseur.

be removed daily as the gauze does not touch the wound and consequently it will not be painful nor cause the scab to be removed. In case of a bad bruise or contusion the "donut" will enable the injured player to perform at almost 100 per cent efficiency.

Body powder should be used freely and often as it will do much to prevent many of the various types of dermatitis that are the bane of every trainer's existence. Plenty of soap and water in the shower also helps greatly in this respect. All players should develop the habit of taking a shower whether they worked out hard enough to break a sweat or not, as the uniform is never really clean unless it has just come from the laundry.

For men who perspire excessively, especially in hot weather, it is a good practice to paint a two-inch band around each wrist with tincture of benzoin as this helps keep the hands dry and consequently helps throwing and batting. Tincture of benzoin ap-

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plied very lightly to the fingertips and heel of the hand also helps.

The weight chart used widely in football, is not used much in baseball. I, for one, am a great believer in it as any daily progressive loss of weight after a player has reached his playing weight and is in condition is reason for a thorough medical examination by the team physician. Many diseases are caused by or cause this phenomenon and if detected early can do much to maintain a high level of health and efficiency in the squad.

Another quality which a trainer must possess is imagination and ingenuity. Often a player will turn up with a peculiar type of ailment, or a simple common ailment in a somewhat inaccessible portion of his body. This will make treatment extremely difficult. The trainer who has a good background in Anatomy, Physiology, Physics and has the aforementioned imagination and ingenuity with which to temper his education and experience, can devise bandages, equipment, etc. to fit each of these unusual situations which occur quite frequently.

Distance Running

(Continued from page 11)

prove the boy's running form, his speed, and in some measure improve his endurance.

Speed Work

Speed work is an important part of the week's work program in that the coach should improve the boy's speed as much as possible. I feel that the greater the margin of speed that can be developed in a boy, the easier it is for him to achieve top performance in his event. It is logical to assume that a boy who can run 50 seconds on the quarter and has ability to sustain effort should reach the 4:10 mile with greater ease than a boy who can run only :56 on the quarter.

It is well established that milers and two-milers do well on speed assignments if they are assigned work with the half-milers. It is true in almost all cases that the longer distance runners will meet this assignment with a challenge and turn in pretty good speed performances. By the same token, the middle-distance men will do better by giving them part of the distance runners' work as an overdistance assignment. A work program that has enough variety in overdistance, pace, and speed, will be of advantage to the boy and the

coach in that it is often possible for a boy to do well over any distance from the 440 up through the two mile and including cross-country — Wisconsin's great Gehrman is an excellent example of this. Of course, there have been many others, and I feel that they had a varied program at various stages to enable them to do this.

There is great value in giving speed work assignments to the distance runners at the end of each day's work. This may be in the form of 110's and 220's. A freshening-up process seems to go on in the runner after he has had these speed assignments at the end of his day's work. I am confident that it makes the boy feel better, and at the same time he is getting speed training that can be used in his kick at the end of the race.

I have made no attempt to set up a weekly work schedule. I feel that it is wrong to give a set schedule of work for all boys. The tremendous difference in boys' physical and mental abilities must be considered in setting up work programs for them. The amount of work given each day will vary with the individual candidates, and it would be wrong to work them to the same degree.

I feel that it is of utmost importance to know a boys' complete background and also his physical limitations in planning his development as a college runner. Also, it is well to keep in mind the periods of development so that a boy is improving at the proper rate at the proper time.

In conclusion, I would like to state that it is the coach's responsibility to have a mutual feeling with the candidate regarding his goals and ambitions in his event.

The Return of Fonville

(Continued from page 28)

The real thrill came after the meet, however, when we learned that he had quietly sought out the physician who had performed the operation and handed him the first-place gold medal.

This, then, is the complete story of Charlie Fonville. The distances he may put in the future are not important. His gracious acceptance of defeat and his victory over a seemingly insurmountable obstacle are important. It is an incident of this type which should make all of us in coaching realize how fortunate we are to be associated with such fine young men.

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Director—Ron Crawford, Adams State College.

See advertisement p. 62.

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Information—Tuition \$17.50 does not include room and board. Average cost of room \$2.00 per day, board \$2.00 to \$3.00 per day.
Director—Ellsworth W. Millett, Colby College.

COLORADO COLLEGE

Colorado Springs, Colo. June 5-9
Courses—Football, basketball.
Staff—Frank Leahy, Joe McArdle, Bernie Crimmins, two Notre Dame players to demonstrate, Forrest Anderson.
Information—Tuition \$25.00. Room and board \$25.00 for period of school.
Director—Allison Binns, Colorado College.

See advertisement p. 65.

COLORADO H.S. COACHES ASSN.

Denver, Colorado August 22-25
Courses—Football, basketball, baseball, track, training.
Staff—Jess Neely, others to be selected.
Information—Average cost of room is \$5.00 and board \$3.00 per day.
Directors—N. C. Morris, Don Des Combes, Edward Flint.

COLORADO, UNIV. OF

Boulder, Colorado June 19-July 22
Courses—Football, basketball, track, gymnastics, intramurals.
Staff—"Dal" Ward, Forrest Cox, Frank Potts, Charles Vavra.
Director—Frank Potts, University of Colorado.

CRAMER'S TRAINING CLINIC

Muehlebach Hotel, Kansas City June 24-25
Courses—Complete coverage of all phases of training.
Staff—Noble Sherwood, Elliott Stong, Frank

Medina, Duke Wyre, "Eddie" O'Donnell, Hugh Bevans, Lloyd Boughton, David Wike, Ernest Quigley, Fred Peterson, Henry Schmidt, Jack Heppinstall, Lloyd Stein, Jack Williamson, Frank Cramer, Ed Zanfrini, Marty Broussard, Howard Waite, Joe Glander, Al Sawdy, A. S. Reece, Frank Kavanaugh, Tom Hughes and others.

Information—Tuition free, room and board costs will be announced later.

Directors—Cramers, Gardner, Kansas.

EASTERN PA. COACHES ASSN.

East Stroudsburg, Pa. June 19-23
Courses—Football (T and single wing and line play), Basketball, Wrestling, Training.
Staff—"Ivy" Williamson, Sid Gilman, John Michelson, Cliff Wells, Billy Sheridan.
Information—Tuition \$35.00 for Pennsylvania coaches, \$38.00 for out-of-state. Tuition includes room and board.
Director—Marty Baldwin, East Stroudsburg, Pennsylvania.

EDINBORO COACHING SCHOOL

Edinboro, Pennsylvania August 8-11
Courses—Football (demonstrations by Pittsburgh Steelers)
Staff—Sid Gilman, George Blackburn, Joe Madro, Beattie Feathers, Charles Ramey, Joe Potelli, John Michelson, Mike Nixon, Walter Kiesling, Ken Ormiston, Lou Tullio.
Information—Sponsored by Northwestern Pennsylvania Coaches Association. Tuition \$15.00 for members, \$20.00 for non-members. Does not include room and board. Average cost of room \$.50c and board \$2.00 per day.
Director—Jim Hyde, Academy High School, Erie, Pennsylvania.

FLORIDA A & M COLLEGE

Tallahassee, Florida
Dates to be announced
Courses—Football.
Staff—To be selected.
Information—Tuition of \$20.00 includes room and board.
Director—"Jake" Gaither, Florida A. & M. College.

GEORGIA COACHES ASSN.

Atlanta, Georgia August 14-19
Courses—Football, basketball, track, training.
Staff—Herman Hickman, Jess Neely, Bobby Dodd, Ray Graves, "Hank" Iba, others to be selected.
Information—Tuition for football and basketball sessions \$10.00 each or \$15.00 for both. This does not include room and board.
Director—Dwight Keith, Georgia Tech., Atlanta, Georgia.

INDIANA BASKETBALL SCHOOL

Logansport, Indiana August 3-5
Courses—Basketball (all phases of offense, defense, fundamentals, etc.)
Staff—To be selected—will consist of three college and three high school coaches.
Information—Average cost of room is \$2.50 and board \$3.00 per day.
Director—Cliff Wells, Box 83, Tulane University, New Orleans.

IOWA H.S. ATHLETIC ASSN.

Spirit Lake, Iowa August 19-24

Courses—Football, basketball.

Staff—To be selected.

Information—Tuition \$15.00 for Iowa residents, \$22.50 for non-residents. Tuition includes cost of room and board.

Director—Lyle T. Quinn, Boone, Iowa.

KANSAS H.S. ACTIVITIES ASSN.

Wichita, Kansas August 21-25

Courses—Football, basketball, training, track. Staff—Lynn Waldorf, "Dutch" Meyer, another football instructor to be selected. Balance of staff to be announced.

Information—Tuition is \$10.00 which does not include room and board.

Director—E. A. Thomas, New England Building, Topeka.

LOUISIANA H.S. COACHES ASSN.

Baton Rouge, Louisiana Aug. 2-4

Courses—Football, basketball, baseball, track. Staff—Ray Eliot, R. H. Russell, Gus Tinsley and L. S. U. staff.

Information—Tuition for state high school coaches \$2.00 and state college coaches \$5.00. For out-of-state high school coaches \$5.00 and out-of-state college coaches \$10.00. Room is free. School will sponsor an All Star game.

Director—Woodrow Turner, Box 396, Columbia, Louisiana.

MICHIGAN, UNIV. OF

Ann Arbor, Michigan Dates below

Courses—Athletic Coaching and Administration June 26-July 8, Safety Education July 10-July 22, Community-School Camping July 24-August 5.

Staff—Members of the University Coaching Staff.

Information—A course designed to combine theory and practice.

Director—Office of Summer Session, University of Michigan, Ann Arbor, Michigan.

See Advertisement p. 58.

MINNESOTA H.S. COACHES ASSN.

University of Minnesota Aug. 14-16

Courses—Football and basketball.

Staff—Bert Ingwersen, A. T. Gill, University of Minnesota staff.

Information—Free to members of association, \$10.00 for non-members. Tuition does not include room and board.

Director—Kermit Anderson, 829 Plymouth Building, Minneapolis.

MISSOURI, UNIV. OF

Columbia, Missouri June 22-24

Courses—Football, basketball, baseball, track, training.

Staff—"Bud" Wilkinson, Don Faurot, basketball coach to be selected, Wilbur Stalcup, Tom Botts, John Simmons, "Ollie" De Victor.

Information—Tuition of \$10.00 does not include room and board.

Director—Don Faurot, University of Missouri.

MONTANA UNIVERSITY

Missoula, Montana July 24-28

Courses—Football, basketball.

Staff—Don Faurot, George Dahlberg.

Information—Tuition is \$10.00. For reservations at hotels or motels write the director specifying price desired.

Director—Clyde Hubbard, Montana University, Missoula.

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The Practicum is organized into the following three units:

Unit I Athletic Coaching and Administration, June 26 — July 8

Unit II Safety Education, July 10 — July 22

Unit III Community-School Camping, July 24 — August 5.

Each unit carries two hours credit. Practicum may be elected for 2, 4 or 6 hours credit.

Members of the University coaching staff will participate in Unit I. It will include study in modern trends and strategy of school sports; training of athletic teams; liability; officiating techniques; scouting; intramurals; psychology of motor-skill learning; athletic codes; and other current developments.

See Summer Session catalog for complete list of courses in Physical Education.

Direct inquiries to the Office of the Summer Session, University of Michigan, Ann Arbor.

MURRAY STATE COLLEGE

Murray, Kentucky June 8-10
Courses—Football basketball.
Staff—Bobby Dodd, Clair Bee.
Information—Tuition \$10.00 does not include room and board. Average cost of room \$2.50 and board \$3.50 per day.
Director—Roy Stewart, Murray State College.

NEW YORK BASKETBALL SCHOOL

Hancock, New York August 17-19
Courses—Basketball (all phases including single and double pivot, fundamentals, half-time strategy, shooting, etc.)
Staff—To be announced.
Information—Tuition \$10.00 does not include room and board. Average cost of room \$1.50 and board \$2.50 per day.
Director—John E. Sipos, Hancock, New York.

NORTH CAROLINA, UNIV. OF

Chapel Hill, N. C. July 31-Aug. 4
Courses—Football, basketball, baseball, track, athletic injuries.
Staff—Carl Snively, Tom Scott, Bob Fetzner, Bunn Hearn, "Doc" White.
Information—This is the 24th annual coaching school and tuition is free. Average cost of room \$2.00 and board \$2.50 per day.
Director—Tom Scott, University of North Carolina.

OHIO H.S. COACHING SCHOOL

Waite H. S., Toledo, O. Aug. 7-11
Courses—Football, training.
Staff—Matty Bell, Jim Achen, Wes Fesler, Bob Snyder, Hollie Bevan.
Information—Fifth annual coaching school sponsored by the Ohio High School Football Coaches Association. Tuition for members of Association \$10.00, others \$15.00. Does not include room and board.
Director—Frank Pauly, Waite High School, Toledo.

OKLAHOMA COACHES ASSN.

Oklahoma City, Okla. Aug. 14-18
Courses—Football, basketball.
Staff—Lynn Waldorf, Biggie Munn, basketball staff to be selected.
Information—Tuition of \$5.00 does not include cost of room and board. Average cost of room is \$2.50 and board \$3.00 per day.
Director—Clarence Breithaupt.

SO. CAROLINA COACHES ASSN.

Columbia, S. C. August 7-11
Courses—Football, basketball, baseball, track, girls basketball.
Staff—Frank Leahy, Cliff Wells.
Information—Tuition for members \$10.00, non-members \$15.00. Room is free and board approximately \$2.00 per day.
Director—Harry F. Hedgepath, 1623 Harrington Street, Newberry, South Carolina.

SOUTH DAKOTA ATHLETIC ASSN.

Huron, South Dakota August 15-18
Courses—Football, basketball, six-man football, training.
Staff—Don Faurot, Bruce Drake, H. R. Dietrich, trainer to be selected.
Information—No tuition charges.
Director—R. M. Walseth, St. Charles Hotel, Pierre, South Dakota.

THE ATHLETIC JOURNAL

SOUTHERN ILLINOIS UNIV.

Carbondale, Illinois August 21-23

Courses—Football, basketball.

Staff—Adolph Rupp and two instructors for football to be announced.

Information—Tuition is free and average cost of room is \$2.00 and board \$2.50 per day.

Director—Glenn Abe Martin, Southern Illinois University.

SPRINGFIELD COLLEGE

Springfield College July 6-August 11

Courses—Beginning and Advanced Football, Beginning and Advanced Basketball, Soccer, skill courses in baseball, swimming, tennis, handball, badminton, dancing, volleyball, boxing, games.

Staff—George James, "Eddie" Hickey, Irvin Schmid.

Information—Sixty hours in each sport with regular college credit.

Director—Summer Session, Springfield College, Springfield, Massachusetts.

See advertisement p. 54.

TENNESSEE COACHES ASSN.

Univ. of Tenn., Knoxville July 27-29

Courses—Football, basketball, baseball, track, training.

Staff—Bob Neyland, Herman Hickman, basketball to be announced, Carelton Crowell, Cy Anderson, Mickey O'Brian.

Information—Tuition is \$10.00 which includes room and board.

Director—Louis Johnson, University of Tennessee, Knoxville.

TEXAS H.S. COACHES ASSN.

Austin, Texas July 31-August 4

Courses—Football (T and single wing), basketball, baseball, track and training.

Staff—"Biggie" Munn, Hugh Daugherty, "Bud" Wilkinson, Gomer Jones, Adolph Rupp, "Hank" Iba, Clyde Littlefield, Marty Karow, Eddie Wojceki.

Information—Tuition \$12.00 for members, \$15.00 for non-members and high-school players, \$25.00 for sporting goods salesmen (4 for each \$25.00). Tuition does not include room and board. Average cost of room \$2.00-\$3.00 and board \$3.00 per day.

Director—L. W. McConachie, 2901 Copper Street, El Paso, Texas.

UTAH STATE COACHING SCHOOL

Logan, Utah June 5-9

Courses—Football, basketball, baseball, training.

Staff—Jess Neely, Bruce Drake, Bert Dunn, Roland Logan.

Information—Tuition of \$10.00 does not include room and board. Average cost of room \$2.00 and board \$2.00 per day.

Director—Joe E. Whitesides, Utah State College, Logan, Utah.

VIRGINIA STATE COLLEGE

Petersburg, Virginia July 17-22

Courses—Football (split T, team defense and line play), basketball, training.

Staff—Jim Tatum, Marvin Bass, Everett Case, "Duke" Wyre.

Information—Tuition of \$30.00 includes room and board.

Director—"Sal" Hall, Virginia State College, Petersburg, Virginia.

PERFECT TURF FOR FOOTBALL AND ATHLETIC FIELDS WITH A MARCH AUTOMATIC IRRIGATION SYSTEM

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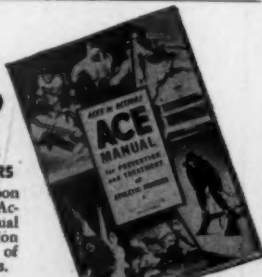
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"It is a fine and carefully selected course in baseball."

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9 Booklets for Coach & Players—plus 2 booklets for each position—for distribution & return.
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151 Coaching questions with 93 answers—Baserunning—Hints on Schoolboy Pitching & Batting—Building batting Cages, Backstops, Scoreboards, etc.
46 Pages of useful dope. Loose Leaf Style.

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Add 15c. postage to each order.

WASHINGTON H.S. COACHES

University of Washington Campus,
Seattle August 21-25

Courses—Football, basketball, baseball, track.
Staff—Henry Frnka, Eddie Hickey, Hec Edmundson, baseball to be selected.

Information—Tuition free to members and \$10.00 for non-members which does not include room and board.

Director—A. J. Lindquist, Garfield High School, Seattle.

WEST VIRGINIA UNIVERSITY

Morgantown, W. Va. June 8-July 18

Courses—Football, basketball, administration, rules interpretations, intramurals, training.
Staff—G. Ott Romney, Art Lewis, John Shothey, Eugene Corum, Harold Lahar, Patrick Tork, Lee Patton, A. E. Lumley, William Fugitt, Dana Lough, Jack Gardner.

Information—Tuition is \$5.00 per hour for in-state residence, \$7.00 for out-of-state residence. Courses carry six graduate hours. Average cost of room and board \$2.50 per day.

WISCONSIN H.S. COACHES ASSN.

University of Wisconsin,
Madison, Wisconsin Aug. 14-v8

Courses—Football, basketball.
Staff—Wes Fesler, Ivy Williamson, "Tippy" Dye, Bud Foster.

Information—Tuition \$5.00 for members, \$10.00 for non-members. Average cost of room is \$1.00 and board \$2.00 per day.

Director—Harold A. Metzen, 2106 E. Mifflin, Madison, Wisconsin.

WISCONSIN, UNIV. OF

Madison, Wisconsin June 26-Aug. 18

Courses—Problems in various sports, physical education, methods and curriculum, conditioning and health education, recreation, organization and administration, measurement and research studies.

Staff—University of Wisconsin staff and visiting instructors.

Information—Request graduate catalog for requirements for graduate work leading to a master's degree. For tuition and living expenses write the director.

Director—Director of Summer Session, University of Wisconsin.

See advertisement p. 58 March issue.

Offensive Center Play

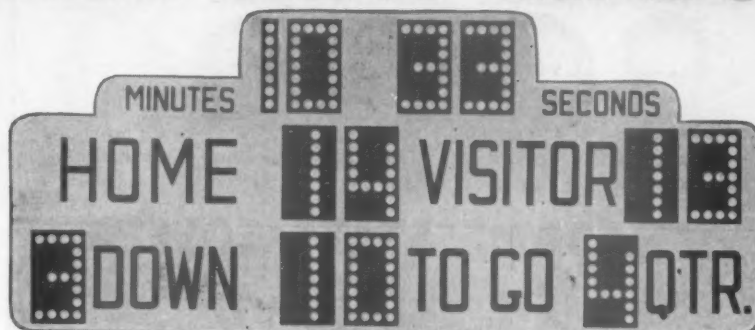
(Continued from page 12)

His body bends forward and down, along with the arc of his right hand. The direction of the arc is in a straight line from over the head to the crotch of the spread feet. The ball is released with a snap of the wrist when the elbow hits the crotch. This is done continuously until control and accuracy are achieved in the flight of the ball to the receiver standing behind the center. As accuracy is achieved the stroke of the swing is decreased.

Next, the center assumes the proper stance looking through his legs. The ball is cocked above his head and thrown between his legs to the receiver. This is done until accuracy is accomplished. Gradually the stroke is shortened until the center merely lifts the ball from the ground and throws it back to the receiver. Up to this point the ball never hits the ground in this drill. Now the ball is placed on the ground in front of the center as far as he can reach with the right hand on the front of the ball. Still using the one-hand pass, the ball is passed directly back to the receiver. As the speed and accuracy of direction consistently improve, the left hand is now placed on the ball to guide and control its flight. The left hand will also add power to the flight of the ball, but the main function of the left hand is to guide the ball. This drill will develop and improve the confidence of the center in his ability to get the ball back to the receiver. Five minutes every day before practice will improve his dependability.

In the T formation the same stance is assumed. If direct passes are to be used to the halfbacks and the fullback it is advisable that the center place both hands on the ball at all times. If only one hand is placed on the ball, the center must be able to center directly back to the halfbacks and the fullback with only one hand. This precaution will eliminate any tip-offs. The preceding mechanics of centering apply to the direct passes back to the halfbacks or fullback. The only change is with the quarterback standing directly back of the center. The ball has to pass between the quarterback's legs to the left or right of his left or right leg. The snap-back to the quarterback should be analyzed at the very beginning of practice in the fall. The quarterback should grip the ball in his right hand as he wishes to receive it from the center. With the center assuming his proper stance, the quarterback with the ball in his right hand places the back of his hand under the crotch of the center. The hand should be pressed upward applying as much pressure as the center needs to feel and know where the ball is to be placed. The center then grips the ball with the right hand with the quarterback still holding the ball. Caution should be exercised by the quarterback and center always to use the same grip and apply the same pressure and position of the hand. The quarterback should grip the back half of the ball; the center the front half. The mechanics of placing the

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FB-50

- Heavy aluminum alloy cabinet 18" long x 8' high.
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Basketball
U. KANSAS



Basketball
U. UTAH

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19" x 12" x 3"



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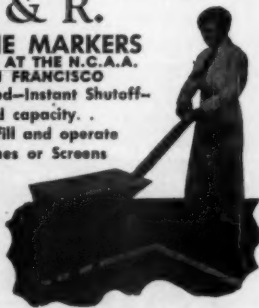
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ball in the hands of the quarterback is merely snapping the ball upward. The center's elbow bends outward, the forearm bends inward and the upper arm bends outward. The ball must be slapped in the quarterback's hand hard. This eliminates fumbling and grabbing for the ball.

About the time a center begins to think he has practiced centering all that is necessary, the coach will begin to notice muffing and fumbling of the ball. Five minutes every day on fundamentals of centering will instill confidence in the center and the ball-carriers. Be sure the center, above all, knows the plays and snap signal. If the center should get bumped unusually hard, check to make sure that he is not groggy as this may affect him mentally. Never take a chance. A second string center may save a game while the injured center is resting. No matter what the size of the squad, it is best to have at least three players capable of taking over the duties of the center. Some day it may pay big dividends.

Blocking and Tackling

(Continued from page 36)

One of the laws of learning is that it is pleasant to respond when one is prepared and unpleasant to be called upon when not prepared. So it follows that the players will enjoy the contact if they are well prepared before being required to block and tackle. Football coaches should follow this rule and retain the fun in early season practice by leaving the pads in storage and the dangerous contact work until the last cool days before their first game.

Baseball Play-Situations

(Continued from page 26)

Six completes double play as illustrated. Play is backed up by 4, 8, and 2.

B. COACHING PRINCIPLES. 1 does not stand holding the ball waiting for 6 to cover the bag but fires immediately giving 6 the proper lead. If 6 is playing in the hole, 4 makes the pivot at second, in which case 1 throws ball directly over the bag.

The Double Steal, (Diagram 6). A. DEFENSE. One pitches (a). R1 runs as if stealing second, but stops about 20 feet from bag at z. Two throws to second, aiming at spot knee-high at the bag (b). As throw goes through to second, R2 breaks

for the plate. As R1 starts to steal, 4 covers second at x. Using his peripheral vision, 4 watches to see if R2 breaks for home. He also listens for warning from 6. As 4 sees R2 break for the plate, he runs in to cut-off the throw from 2 at y. Four then throws ball back to 2 for the put-out at the plate. Four does not come in to cut-off the throw until R2 breaks for the plate.

Variations. A. Two fakes throw or bluff pegs to second, then throws to third picking-off R2. b. Two pivots and throws to third immediately to pick-off R2. c. Two throws high and hard to 1, attempting to draw R2 off third.

B. OFFENSE. R1 always stops at z if to score is the purpose of the play. This is done to give R2 time to cross the plate before R1 is put out. R2 makes sure throw is going through to second before he breaks for home.

C. COACHING PRINCIPLES. The double steal with men on first and third should not be used as an offensive weapon against a well-coached team unless there are two out, a weak hitter at the plate and the score is needed badly enough to gamble for it. The defense against this double steal should be perfect. R2 should never be able to score except in the case of an error.

Game-like drills may also be set up for practice on other plays such as: 1. All double plays. 2. Pick-off plays from pitcher or catcher. 3. All steals—offense and defense. 4. All bunt plays—offense and defense. 5. Fake bunt and hit. 6. Fake bunt and steal of third behind charging third baseman. 7. Hit-and-run. 8. Circling the bases on a long hit. 9. All outfield throws and relays. 10. Over-all drill, coach setting up situation and fun-ging from the plate.

Batting practice can be made exceedingly interesting, instructive and game-like by having the batter take his four cuts and a bunt against a regular defensive team. A base-runner runs out all of his hits except the last one, which the batter himself runs out. The bases are cleared after every three outs and the score kept. In this way batting practice teams can compete against each other. This drill also affords an excellent opportunity for practice on giving and taking signals and practice on coaching the base-lines. We have found this sort of batting practice to be a very valuable and stimulating and teaching technique.

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non-boresome conditioning and meaningful practice on base-running and sliding fundamentals are afforded. We have found these drills to be an excellent opportunity to get across the point that all play-situations must be "thought-out" before the start of the play. The player who "thinks-out" all the possibilities of a play-situation and decides beforehand what his course of action will be, will respond with considerably more accuracy and speed than the player whose mind is elsewhere. Drill will further improve the speed and accuracy of his responses. Thus costly mistakes made by the player are reduced, which means fewer games lost due to this factor. Also, the knowledge and skills garnered by the player from these drills, plus the success he will achieve in actual game situations as a result of his acquired skills, will contribute greatly to his gaining the confidence and poise so necessary to the competent ball player.

Post-War Baseball

(Continued from page 16)

and good sportsmanship.

All West Virginia is very proud of Wheeling's Post Number 1 team which accomplished what no other West Virginia team in the history of legion baseball could do by winning the state, regional, and sectional championships and reaching the "Little World Series" last year at Omaha, Nebraska. This really was a great triumph for the Wheeling team to be one of the four survivors from a field of some 11,000 teams that had high aspirations of gaining the national finals. For the past several years Parkersburg has played host to the regional tournament. At this tourney, champions from Delaware, Maryland, District of Columbia and West Virginia vie for the crown. There is every reason to believe that the national administrators again will favor West Virginia for the regional play-off this year since the tournaments in the past have proven so successful.

Amateur Baseball

Not all baseball in West Virginia is confined to college, senior and junior high schools and American Legion baseball. Every city, town and village is represented by an amateur team or teams of one type or another giving hundreds of boys an opportunity to participate in a competitive game of their own choice.

In some cities, recreation departments have been the moving factors

in the promotion of baseball by organizing various leagues that reach boys of different age groups. Instruction in the fundamentals of baseball and team play by capable teachers precedes league competition in some cities, particularly in the midjet group (boys under 13 years of age) and junior group (boys 14 — 17 years old). Usually, the teams are sponsored by some business enterprise or civic organization and directed by an outstanding adult leader of high principles and character. Besides the midjet and junior leagues, there are other leagues known as the senior, city, twilight, county, etc. On these teams are boys from 18 years of age on up. In the towns and villages adult interest in youth is chiefly responsible for the current boom in amateur baseball. Many adults give their time and ability in order that youth may enjoy the benefits and learn the valuable lessons of citizenship from the game of baseball.

This year the foundation has already been laid for the reorganization of the West Virginia Amateur Baseball Association which will be an affiliate of the American Baseball Congress. The state association will be composed of amateur baseball leagues and the West Virginia champion will qualify for play in the national tournament at Battle Creek, Michigan. The state association was last active in 1941. In that year, Koppers of Fairmont represented the state at the national tournament.

West Virginia Conference

Since the end of the war interest in the West Virginia Intercollegiate Baseball Conference has steadily increased to the extent that twelve out of fourteen schools fielded a team in the 1949 season. Competition for the conference championship honors has been very keen and exciting in the post-war seasons right up to the final game. On the basis of percentage, the conference baseball championship was won by Fairmont State in 1946, West Virginia Institute of Technology 1947, Salem College in 1948 and the honor was shared by Salem and Morris-Harvey College in 1949.

There is a recent trend of policy, and a good one, in many of the conference schools to break away from the tradition of one man coaching all three major sports. With this change and with a better brand of baseball being played in the high schools the future of college baseball in West Virginia looks very bright.

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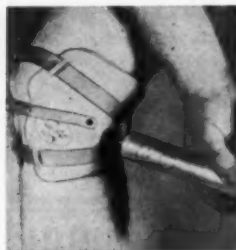
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W. J. VOIT Rubber Corporation has released its new 1950 Athletic Equipment Catalog. New and improved items illustrated and described include the XB20 Custom Basketball, now made with "cold rubber"; an improved line of PG Utility Balls; an improved and more versatile BT2 Professional Model Baseball Batting Tee; a three-quarter length Air Mattress; in all, some seventy-five items are cataloged. Copies of the new catalog may be obtained by writing: Voit Rubber Corporation, 1600 East 25th Street, Los Angeles 11, Calif.

UNITED States Rubber Company is now producing a special baseball shoe for amateur sports. Designed for comfort, safety and long wear, it is made with a molded, rubber cleated sole, to insure fast stops and good grip on grass and skin diamonds while eliminating the danger of spiking during play. This washable shoe, known as Little League Keds, was recently approved for play in Little League baseball. They are being made in boys' sizes from 1-6, and in men's sizes from 6-10.



THIS "Aire-Fit" knee brace employs a new principle of padding and bracing (with air) that cushions shock, braces securely and allows complete freedom of movement. Although designed for the support of sprained or "Trick" knees, it can also be used as a brace for the prevention of injuries. Application is made by strapping snugly around the knee and applying pressure by rubber bladders on both sides of the joint. Made by: "Aire-Fit" Pad and Brace Company, Elyria, Ohio.

SKYPOLE is the name of this new vaulting pole made of Sila-flex which is fiberglass bonded together with a patented phenolic under high pressure. The pole will not split, chip, crack, dent or rust and is unaffected by temperature or humidity. A vaulter cannot produce enough force to even approach a critical stage with Skypole. Six different flexions in three lengths give a choice of poles that will fit any size vaulter. Made by: Skypole, Box R 15'-7", Seal Beach, California.



IN a recent survey of the nation's coaches made by the Wright Manufacturing Company, one of the questions asked was: "How can the present football cleat be improved?" This new hexagon-based cleat is the result. It may be quickly screwed on or off with an ordinary light wrench, thus saving minutes consumed in replacing cleats. Exhaustive tests were made to determine exactly the degree of hardness to be used to avoid the extremes of quick wear and shattering. Made by: Wright Mfg. Co., Box 6567, Houston, Texas.

AN aid to the swimming coach is this flutter board known as Swim Buoy. Made of inflatable latex rubber, it enables the beginner to acquire the elementary skills needed by all swimmers with confidence. It may be held in the hands while practicing kicking, strapped to the legs to permit practice of arm movements or strapped to the back so the novice can get the feel of floating. It also serves as a life preserver or cushion. Made by: Ocean Pool Supply Co., 1140 Broadway, New York City.



have had better than average success in baseball. In fact, the baseball team of West Virginia University in 1948 posted one of its best records in twenty-five years. Marshall College, once a power in the defunct "Buckeye Conference", is again on the main line in baseball and will be a respectable opponent for any college nine.

Summary

To summarize briefly, we believe that the following factors may be attributable for the postwar boom in amateur baseball: (1) American Legion promotion on state-wide basis; (2) the sponsoring of the annual state high school tournament; (3) university and college workshops; (4) major league films; (5) public relations and major league try-out camps; (6) the return of professional baseball; (7) acceptance of the new philosophy of competitive sports; (8) more and better qualified adult leaders of baseball; (9) playing of baseball as a medium of partially preventing juvenile delinquency; (10) the press and the radio as mouthpieces through which the public receives its ideas concerning the sport; (11) sponsoring of midget-junior leagues by city recreation departments and (12) the return of collegiate baseball.

In conclusion, I would like to suggest that more opportunities in baseball be given to boys in the junior high schools, not so much for the purpose of winning championships but for the boys to learn the lessons of citizenship, to make adjustments, to develop confidence, to acquire friends and for the adult leaders to see real demonstration of democracy in action.

Training For the Shot

(Continued from page 10)

yard dashes. On the last dash, slow down and finish by striding 150 yards.

Thursday: Jog 440. Calisthenics. Do some finger exercises. Tune up on seven or eight puts. Check for height, angle of release, footwork and recovery. Run over three hurdles. Try a few jumps with the high jumpers. Run two 50-yard dashes. Jog 440.

Friday: Jog 440. Limbering-up exercises. Take an easy 220 yards.

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The Advancement of Athletics

(Continued from page 20)

has materially lessened the frequency of injuries and, as such, has removed much of the stigma attached to combat games. In this connection much credit must also go to the excellent insurance programs in force in most states.

Five. More leisure time. With the shortening of the work week more and more time has become available for the individual to witness or actively engage in athletic contests. Accompanying the shortening of the work week are the many labor-saving implements at home and on the farm which have also greatly increased the amount of leisure time.

Six. Increased population. The rapid growth of the country has necessitated more schools. Whereas formerly there were many accredited schools with enrollments of ten or less students, today through the population increase and consolidation, the number is much less. Naturally the increased population has been an important factor in the attendance figures.

Seven. The improved transportation facilities of today have likewise been an important factor in the growth and development of athletics and recreation. Today's transportation has made possible the formation of leagues and conferences comprising schools and teams of comparable size and strength. From a spectator standpoint the urban dweller is only minutes away from the ball park or stadium, and with the automobile and hard-surfaced roads, athletics has been made available with little effort to the rural part of our population.

Eight. Not to be overlooked in any resume of this nature is the growth of the realization that athletics is a part of education. With this realization has developed the further realization that the coach is not a muscle man in a sweat shirt but a respected and admired member of the faculty and community. The influence of the coach in his community has been a vital factor in spreading the value of athletics among young and old alike.

Nine. Closely related to number eight is the realization that the lessons learned in athletics are the lessons that must be learned in life. The values which athletics teaches are also the values which we most prize in the successful citizen. As the facts became apparent to bear this out many individuals no longer looked upon athletics as a waste of time.

Ten. The changed concept of physical education. The old concept of physical education, namely, calisthenics and indian clubs, left a sour taste with many of those subjected to it. The new concept of teaching athletic skills has introduced the youth of the country to our athletic contests with the result that untold thousands now participate.

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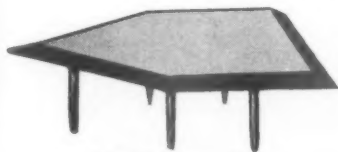


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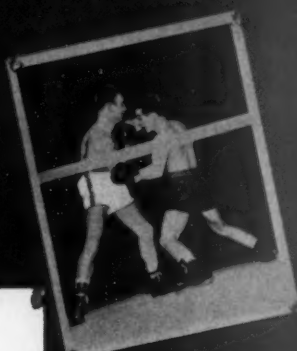
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